Construction News

★Denotes work advertised in ENGINEERING NEWS.
✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

New York Central Operating Officials—Under the reorganization plan of the New York Central two grand divisions will be established—the Eastern, under the supervision of William J. Fripp as general manager, with headquarters at Albany, and the Western, under D. C. Moon, general manager of the Western division, with headquarters at Cleveland. Under Mr. Moon there will be two general superintendents: Albert S. Ingalls, who will have charge of the line between Buffalo and Toledo, with headquarters at Cleveland, and Frank H. Wilson, who will be in charge of the line between Toledo and Chicago, with headquarters in the last named city. Under Mr. Fripp there will be three general superintendents: T. W. Evans, who will have charge of the line between Buffalo and Syracuse and from Montreal to Clearfield, Penn.; E. J. Wright, in charge of the line between Syracuse and the electric zone in New York, including the line into the Adirondacks and the Harlem division, and Miles Bronson, who will have immediate charge of the electrical division.

Electricity on The Farm—In an address presented at a Commonwealth Conference at Eugene, Ore., on "Electricity in Rural Districts," J. L. White, Mgr. of the Albany Division of the Oregon Power Co. said: "It is a fact that it will not pay to make long and costly transmission line extensions solely for the purpose of serving a scattered farm load, although it is equally true that a farming load will pay as a byproduct when such extensions already exist or are being made to take care of other classes of business. Before a great many years the country will be covered by a network of transmission and distribution lines reaching out from a central point to small communities, and incidentally furnishing power for many other purposes along the way. It has been demonstrated time and again that the electric method of doing things tends for greater efficiency. Starting with water power converted to electric power we can go on producing forever any mechanical operation. We can re-fertilize our lands, cultivate them, harvest and transport the crops to market, cook our meals, light and heat our homes, etc., and do it efficiently. The great problem of all ages has always been to connect the producer and the consumer. If we could produce, distribute, and consume all other products as efficiently and as simply as we can electricity, this great loss between production and consumption would be reduced 80 to 90%."

The Corrugated Bar Co., Buffalo, recently secured through its St. Louis office a contract for 6,400,000 lb. of bars, for the new cotton warehouse at New Orleans. When it is recalled that this cotton warehouse is one of the largest structures of its kind in existence, and as it is probably the forerunner of many similar structures in the South, due to a new warehousing plan, it means more than the initial order. The cotton warehouse in New Orleans is to be owned by the municipality, the same as the dock system and railways adjacent to the docks. The contract for the warehouse was awarded to the Jefferson Construction Co., New Orleans.

James Milne & Co., 11th Regent St., London, and 30 Church St., New York, N. Y., wants an agency for gas engines and allied machinery.

Thomas W. Golding, Assoc. Mem., Am. Soc. C. E., Structural Engr., has removed his office to the Central Bldg., 25 West 42d St., New York, N. Y.

Cost of Cast-Iron Pipe

The accompanying table shows the cost of cast-iron pipe purchased by the Metropolitan Water and Sewage Board of Massachusetts from 1895 to the end of 1914, and previous to that date from 1868, by the Boston Water Department. The figures are computed from a table prepared by Dexter Brackett, Chief Engineer of Water-Works. Some explanation is necessary for their proper understanding. Prior to 1894, pipe was bought in tons of 2240 lb., and since that date in tons of 2000 lb. The table, however, has been computed for tons of 2000 lb. In a number of years, several lots of pipe were purchased, and for the purpose of this table an average was computed of the various lots. In the table four columns are given, one showing the number of tons of pipe larger than 20 in., purchased, and adjacent, the cost; in another column the number of tons purchased from 10 to 20 in. with the cost. These figures do not represent the cost of pipe at the foundry, nor the selling price at the foundry, but simply what one purchasing department paid for its pipe for a number of years.

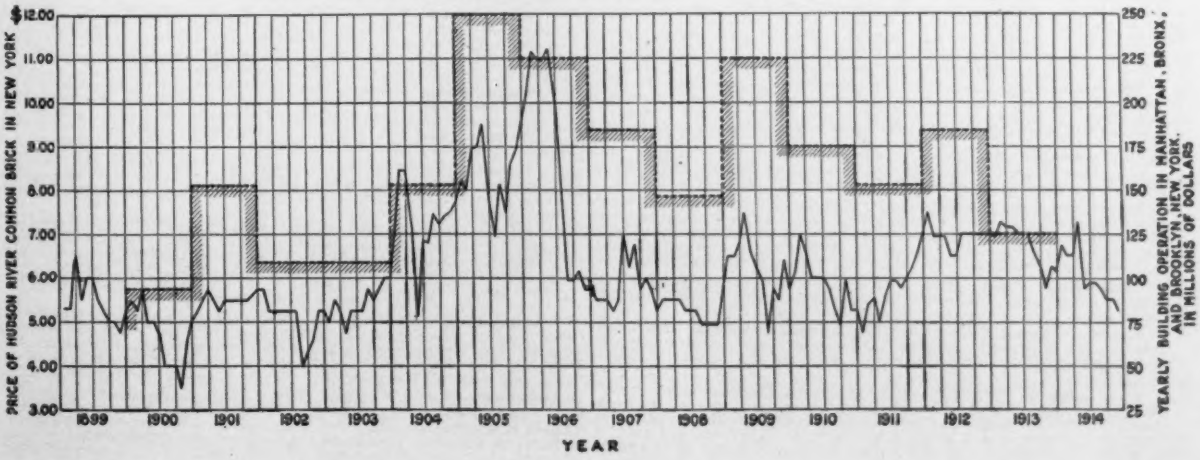
CAST-IRON PIPE IN BOSTON

Year Purchased	20-In. and Larger Tons Purchased	20-In. and Larger Price per Net Ton	10-In. to 20-In. Tons Purchased	10-In. to 20-In. Price per Net Ton
1868	2,850	$75.78	1,430	$72.40
1870	1,310	53.00	2,732	52.69
1871	....	....	1,726	57.50
1873	....	....	1,652	61.03
1874	1,934	51.55	2,846	48.87
1875	336	46.00	3,858	42.00
1876	....	....	2,442	35.00
1877	3,808	28.94	605	30.00
1878	538	25.92	1,086	26.47
1880	5,624	40.95	778	42.00
1881	28	31.90	756	31.90
1882	....	....	908	39.00
1883	1,188	26.24	750	36.80
1885	3,158	26.45	1,160	29.05
1886	....	....	1,198	29.40
1887	2,906	33.42	2,218	31.66
1888	....	....	1,568	28.45
1889	1,624	27.45	930	27.55
1890	1,008	30.34	1,848	30.89
1891	1,456	27.95	1,848	27.80
1892	....	....	1,904	25.40
1893	1,668	25.21	112	25.94
1894	1,692	22.45	2,016	22.45
1895	12,152	20.65	....	....
1896	28,955	19.21	1,395	18.18
1897	22,837	17.56	376	16.82
1898	1,958	17.55	2,548	16.84
1899	1,708	18.76	....	....
1901	18,682	24.25	....	....
1902	....	....	417	25.40
1908	4,251	22.40	....	....
1909	9,736	24.37	753	22.98
1910	1,657	24.72	....	....
1911	2,429	21.60	60	21.60
1912	107	23.50	20	23.50
1913	403	23.00	....	....
1914	9,112	20.00	30	20.90

Brick Prices and Building Operations

Remarkable for the slight change in price rather than any other one thing has been the course of the brick market in New York for the last few years. Figures recently compiled by the "Record and Guide," New York, have been used in the accompanying chart. The only real advance was during the building of the Rapid Transit System and during the building boom which followed. The price of $7 per thousand has only been exceeded on a few occasions since the culmination of that boom in the early months of 1907. The building operations in the three principal boroughs of New York City expressed in millions of dollars are also shown. There is no apparent relation between the two.

BUILDING OPERATIONS AND THE PRICE OF BRICK IN NEW YORK



RAILWAYS

Massachusetts—The Walworth Mfg. Co. has applied for permission to construct a two-mile railway along the water front at South Boston, Mass., from the freight yards of the New York, New Haven & Hartford R.R. to Marine Park.

Pennsylvania—Pennsylvania Lines West of Pittsburgh—According to press reports, this company contemplates an expenditure of $500,000 for doubling the capacity of its yards at Midland, Penn. Thomas Rodd, Pittsburgh, is Ch. Engr.

Virginia—Southern Ry.—This company, it is reported, is receiving bids for the construction of a second track from Orange to Charlottesville, Va., about 28 miles. W. H. Wells, Washington, D. C., is Ch. Engr. Constr.

Florida—Palm Beach & Everglades Ry.—This company has applied for a charter to construct a 40-mile railway from Palm Beach to Lake Okeechobee. James A. Moore, Hotel Halcyon, Miami, is Gen. Mgr.

Florida—According to press reports, the Dowling-Shands Lumber Co. is interested in the construction of a railway from Green Cove Springs to Starke, Fla., about 25 miles.

Mississippi—Meridian & Memphis Ry.—This company has awarded a contract to the PURDUE CONSTRUCTION CO. for the extension of its railway from Union to Sebastopol, Miss., about 15 miles. S. A. Neville, Meridian, Miss., is Vice-Pres.

Wisconsin—Waushara County R.R.—This company has been incorporated to construct a railway from Poysippi and Red Granite, Wis., about 8½ miles. The incorporators are Richard Frank, J. E. Wendt, O. W. Strapp and O. L. Christofferson.

Wisconsin—Montana-Waumandee Ry.—This company, recently organized, is making surveys for its proposed railway which will extend from a point on the Chicago, Burlington & Quincy R.R. through Waumandee to Montana, Wis. H. G. Hawley, Waumandee, Wis., is Ch. Engr. Noted Dec. 17.

Kansas—Kansas & Oklahoma Southern Ry.—This company is making financial arrangements for the completion of its 61-mile extension from Caney, Kan., to Vinita, Okla.

South Dakota—Chicago & Northwestern Ry.—Plans are being made by this company to start work in the spring on the extension of its line from Winner, S. D., through Tripp County into Mellette County. W. H. Finley, Chicago, Ill., is Ch. Engr.

Oklahoma—Kansas & Oklahoma Southern Ry.—See item under Kansas.

Arizona—Magma-Arizona R.R.—This company is being organized for the purpose of constructing a railway from the works of the Magma Copper Co., Superior, Ariz., to Queen Creek and Webster Siding.

Washington—Vancouver Northern R.R.—Henry Grass and O. W. Ford, Vancouver, Wash., are interested in this company, which was recently organized for constructing an electric railway from Vancouver, Wash., to Portland, Ore.

Ontario—The Canadian Northern Ry. and the Canadian Northern Ontario Ry. have applied for an extension of time in which to extend and construct branch lines. The proposed lines are as follows: From Strathcona, Alta., to Calgary, from near Swan River to the Saskatchewan River, from Regina, Sask., to Red Deer River, from Regina to Elbow, from Winnipeg, Man., to the eastern and southern boundaries of Manitoba; in Ontario, from Washago to Kincardine, Armprior to Gananoque, Pembroke to Cobourg, Frenchman's Bay to Owen Sound, Niagara River to Goderich, Hawkesbury to Leeds or Lanary County, Parry Sound to North Bay, Berlin to Toronto, Berlin to Woodstock, Sarnia to Chatham and Orillia to Goderich. M. H. McLeod, Winnipeg, Man., is Ch. Eng. of the Canadian Northern and A. F. Stewart, Toronto, Ont., is Ch. Engr. of Canadian Northern Ontario.

ELECTRIC RAILWAYS

Penacook, N. H.—(Concord post office)—The citizens of Penacook and Boscawen are considering the extension of an electric railway from Penacook to Boscawen Plains.

Newbury, Mass.—(Newburyport post office)—The Massachusetts Northwestern St. Ry. Co. has applied to the City Council for a franchise to construct an electric railway in Newbury to Parker River pavilion.

Worcester, Mass.—The Worcester Consolidated St. Ry. plans to double track its line on Pleasant St., from Richmond to Moore Ave., with a possible view of extending the double tracks to Tatnuk Sq.

Hartford, Conn.—The Norwich, Colchester & Hartford Traction Co. has been incorporated to construct an electric railway to connect Norwich, Bozah, Lebanon, Colchester, Marlborough, Glastonbury and East Hartford. The incorporators include Frank Cronin, Arthur Manning and Wells Strickland.

Thompsonville, Conn.—The Hartford & Springfield St. Ry., Hartford, Conn., intends to introduce into the incoming legislature a bill to amend its charter as to secure the privilege of building a branch line to connect Thompsonville and Suffield. The plan is to build a line from the local wating station through Main St., Thompsonville, and across the Connecticut River to unite with the present Suffield railway at a point on Mapleton Ave., about three miles.

Morristown, N. J.—Bondholders of the New Jersey & Pennsylvania R.R., represented by Benjamin Paskus, plan to purchase the road, running from Whitehouse to Watnong. About $10,000 will be expended to place the line in operation. An extension of the line into Morristown is contemplated.

Leisenring, Penn.—The West Penn Traction Co. contemplates extending its electric railway from Leisenring to Uniontown.

Newport News, Va.—The City Council has granted a franchise to the Newport News & Hampton Ry., Gas & Electric Co., to extend its line down Jefferson Ave. to the municipal boat harbor.

Parkersburg, W. Va.—The Marietta-Parkersburg Interurban Co. has been incorporated to construct a ten-mile electric railway from Parkersburg, W. Va., to Marietta, Ohio. The incorporators are John Kaiser, C. C. Middleswart and M. M. Rose, Marietta, Ohio, and H. H. Archer, Kenner B. Stephenson, Parkersburg.

Charleston, S. C.—The Charleston Consolidated Ry. & Lighting Co. is considering plans for the construction of an electric railway from the United States Navy Yard to North Charleston. George H. Waring, Charleston, is Vice-Pres. and Gen. Mgr.

Lula, Ga.—The Lula-Homer Ry. Co. has completed plans for the construction of a railway from Lula to Homer, about 14 miles. D. G. Zeigler & Sons, Lula, are interested. Noted Oct. 15.

Birmingham, Ala.—The Birmingham Ry., Light & Power Co. has applied to the City Council for a franchise to construct an electric railway from the intersection of Fifteenth Ave., S., and 20th St., S., to Key Circle in the Milner Land Co.'s new division in Birmingham. J. P. H. de Windt, Birmingham, is Gen. Mgr.

Louisville, Ky.—The Louisville Ry. plans to reconstruct its West Chestnut St. line, crossing over to Madison St. and extending west to Shawnee Park, a distance of about one mile.

Columbus, Ohio—The East Linden Electric Ry. Co. contemplates the construction of an electric railway from Leonard Ave., Columbus, to East Linden, about four miles.

Evansville, Ind.—The Public Utilities Co. contemplates the Bell St. extension for a distance of about two miles.

Coffeyville, Kan.—The Union Traction Co. plans to extend its lines.

Salina, Kan.—The Salina St. Ry. plans to build a double track line to the New Union Station.

Beaumont, Tex.—The Houston & Beaumont Interurban Ry. Co. is considering plans for the construction of an electric railway to connect Beaumont, Houston and Anahuac. Anson Miller, G. L. Tufts and L. W. Schwartz, Anahuac, are interested.

Marshall, Tex.—A. B. Blivens and assoicates have applied to the City Council for a franchise to construct an electric railway through Marshall. This is part of a proposed line to connect Marshall, Tex., and Shreveport, La.

Medford, Ore.—Plans are being prepared by the Southern Oregon Traction Co., for the extension of its electric railway in Medford. C. G. Bullis, Medford, is Secy. and Gen. Mgr.

Montreal, Que.—The Montreal Tramways Co. has applied for a franchise to construct an electric railway in Mount Royal. J. E. Hutcheson, Montreal, is Gen. Mgr.

LIGHT, HEAT AND POWER

South Hadley Falls, Mass.—At a recent special meeting, the Board of Selectmen voted to appropriate $40,000 for the purpose of equipping the municipal electric-light plant to generate its own energy, which has heretofore been purchased from the Amherst Power Co.

New York, N. Y.—(Borough of Brooklyn)—Bids will be received until Jan. 25, by C. B. J. Snyder, Supt. of School Buildings, Park Ave. and 59th St., for electrical equipment for new Public School 95, Van Sicklen St. and Neck Rd., Brooklyn.

New York, N. Y.—(Borough of Manhattan—(Official)—Bids will be received until noon, Jan. 29, by the Board of Trustees, Bellevue and Allied Hospitals, 26th St. and First Ave., for reconstructing the existing branch circuits of the electric lighting systems, additional gas piping and gas and electric fixtures for the main building of the Harlem Hospital, 136th and 137th St. and Lenox Ave., Borough of Manhattan. John W. Brannan, M. D., is Pres., Bd. of Trustees.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received until 3 p.m., Jan. 25, by C. B. J. Snyder, Supt. of School Buildings, Park Ave. and 59th St., for heating and ventilating apparatus and temperature regulation in additions to and alterations in Public School 36, on Stagg and Ten Eyck St., between Bushwick Ave. and Waterbury St., Borough of Brooklyn.

Allenhurst, N. J.—Press reports state that Joseph B. Rider, 29 Broadway, New York, N. Y., is preparing plans for an electric-light plant to be built in Allenhurst.

Perth Amboy, N. J.—The Board of Alderman has passed an ordinance for issuing $150,000 in bonds to be used for the construction of a municipal electric-light plant, for which the citizens voted at the November election. S. J. Mason is City Engr. Noted Nov. 19.

Bath, Penn.—It is reported that the Borough Council is considering plans for the establishment of a municipal electric-light plant.

Holmesburg, Penn.—The lowest bid received by the Department of Public Health and Charities, Philadelphia, for the construction of a power plant at the Home for the Indigent, Holmesburg, was that of W. W. Austin at $56,537. Bids were opened Jan. 12. Noted Dec. 3 and Jan. 7.

Philadelphia, Penn.—The Philadelphia Dye Works has had plans prepared by W. E. S. Dyer, Land Title Bldg., for the construction of a one-story brick power plant and boiler house at Hancock and Berks St. The equipment will include boilers, generators, motors, stacks, etc.

Grundy, Va.—The City Council contemplates the installation of a municipal electric-light plant. It is further reported that an ice factory will be built in connection with the electric plant.

Fremont, Mich.—At a recent special election, the citizens voted to grant a franchise to the Grand Rapids-Muskegon Power Co., Grand Rapids, to supply electricity in Fremont. It is reported that this company will take over the municipal plant of Fremont at $13,000. S. A. Freshney, Grand Rapids, is Mgr. of the Grand Rapids-Muskegon Co.

Hillsdale, Mich.—The City Council has authorized the Board of Public Works to install a new 350-hp. water-tube boiler with stoker and equipment in the municipal electric-light plant, replacing the present 80-hp. boiler. The estimated cost of the new boiler is $7500. J. C. Hanson is Mgr., Cont. Agt. and Supt. of the plant.

Saginaw, Mich.—The City Council has been petitioned to call a special election for Feb. 23, to vote on the question of issuing $750,000 in bonds to be used in constructing a municipal electric-light plant. Noted Aug. 13, Oct. 15 and Jan. 7.

Rochester, Ill.—It is reported that the R. Haas Electric & Mfg. Co., Springfield, Ill., has applied to the Village Board for a franchise to build and operate an electric-light plant in Rochester for a period of 20 years.

Oregon, Wis.—It is reported that the installation of a municipal electric-light plant for Oregon is being considered.

Rushmore, Minn.—An electric lighting system is being installed in Rushmore, for which the energy will be obtained from the municipal power plant at Worthington, ten miles distant. A 6600-volt transmission line is now being constructed to supply the service.

Alliance, Neb.—It is reported that the Gas Construction Co. will build a gas plant at Alliance, to cost about $40,000. J. C. Martin, Omaha, is representative of the company.

Trent, S. D.—At a recent special election, the citizens voted in favor of granting a 25-year franchise to the Flandreau Light & Power Co., Flandreau, to furnish electric lights for the town.

Vermilion, S. D.—It is reported that the City Commissioners are considering the matter of purchasing the electric-light plant owned by the Vermilion Milling & Electric Co., to be owned and operated as a municipal plant.

Lusk, Wyo.—At a recent special election, the citizens voted in favor of issuing $8000 in bonds to be used for the installation of a municipal electric-light plant.

University Station, Mo.—(St. Louis post office)—It is reported that a special election will soon be held to vote on the question of issuing $100,000 in bonds to be used for the construction of a municipal electric-light plant with underground conduits. August Henman is Mayor.

San Angelo, Tex.—It is reported that the San Angelo Car Co. will build a new power station, and construct extensions to its lines. J. D. Sugg is owner.

Yale, Okla.—See item under "Water Supply—Irrigation."

Pueblo, Colo.—It is reported that the question of issuing $80,000 in bonds, the proceeds to be used for the construction of a municipal electric-light plant, will be submitted to the voters at the spring election.

Alturas, Calif.—The Union Gas Co., recently organized with a capital of $75,000, plans to build a gas plant at Alturas, and another one at Susanville, Calif. R. R. Rice and J. McCosh Smith are interested.

✚**Longbeach, Calif.**—The City Trustees have awarded the contract for the installation of an electric-lighting system in the district bounded by Broadway, Alamitos, Golden and Ocean Ave. to the WOODILL & HULSE ELECTRIC CO., 111 East Third St., Los Angeles, at $25,415.

Dundalk, Ont.—It is reported that plans will be prepared and bids asked soon for the construction of a new municipal electric-light and power plant. M. W. Ridley, Dundalk, is in charge of the work.

Shelburne, Ont.—The ratepayers have voted in favor of an appropriation to purchase plant and equipment for distributing electric power. The estimated cost of the work is $14,920. Thomas Whalley is Town Clk.

BRIDGES

Greenfield, Mass.—Plans have been prepared for a reinforced-concrete bridge, to cost about $6500, over the Green River, at the site of the present Wiley and Russell Bridge. Eugene B. Blake, William A. Davenport and Frederick E. Hawks form the Committee in Charge.

Central Falls, R. I.—(Official)—Plans submitted by Howard F. Esten, Consult. Engr., 18 East Ave., Pawtucket, R. I., for the construction of a bridge over the Blackstone River between the City of Central Falls and the Town of Cumberland, were accepted by the Bridge Commission. Bids will be advertised for the construction of the bridge within the next ten days. Noted June 18 and 25, Oct. 1.

Waterbury, Conn.—Plans are being prepared by Robert A. Cairns, City Engr., for a bridge over the Naugatuck River at Bank St. The bridge will be 54 ft. wide and 180 ft. long, one span of 60 ft. and two of 50 ft. each. Reinforced concrete, stone masonry and steel spans are being considered. The estimated cost is $75,000.

Harrisburg, Penn.—Press reports state that the Cumberland Valley R.R., a part of the Pennsylvania system, will shortly begin construction of a reinforced-concrete bridge to replace its present steel bridge over the Susquehanna River at Harrisburg. T. B. Kennedy, Chambersburg, Penn., is Ch. Engr. Noted Jan. 1 and 15, Apr. 16, 1914.

✚★**Pittsburgh, Penn.**—The Department of Public Works has awarded the contract for the construction of the steel superstructure of the Sylvan Ave. Bridge to the McCLINTIC-MARSHALL CONSTRUCTION CO., Pittsburgh, at $44,725. Robert Swan is Dir. of Pub. Wks. Noted Dec. 10.

Covington, Va.—The Circuit Court of Alleghany County has rejected all bids received Jan. 4 for the construction of a 100-ft. steel or reinforced concrete bridge over Dunlaps Creek about 5½ miles from Alleghany. The contract will probably be readvertised. Noted Dec. 24.

Richmond, Va.—(Official)—Bids will be received until 11 a.m., Jan. 28, by the State Highway Commission for the construction of a reinforced concrete bridge over the Chickahominy River about three-quarters of a mile from Ellerson, between Henrico and Hanover Counties. G. P. Coleman is State Highway Comr.

Bradentown, Fla.—Bids will be received until 7 p.m., Jan. 22, by W. H. Tracy, Comr. of Pub. Wks., for the construction of a Scherzer rolling lift bridge. Bids will also be received on alternate plans prepared by the bidder. All bids received, Dec. 11, for this work were rejected. Noted Dec. 10 and 24.

✚**Fort Lauderdale, Fla.**—The Board of Commissioners of Dade County has awarded the contract for the construction of a bridge across the New River at Fort Lauderdale to the CHAMPION BRIDGE CO., Wilmington, Ohio, at $22,000. Noted July 23, Aug. 20, Oct. 22, Nov. 19 and Dec. 24.

Cordova, Ala.—It is reported that the Board of Commissioners of Walker County, Jasper, has decided, in connection with the improvement of the Birmingham-Jasper Highway, to build a steel bridge over the Warrior River at Cordova, to cost from $25,000 to $40,000. Noted May 19, 1914.

Montgomery, Ala.—The Commissioners of Montgomery County, Montgomery, and of Elmore County, Wetumpka, plan to build a bridge across the Tallapoosa River, to cost about $50,000. The cost will be shared equally by the two counties.

✚**Lake Charles, La.**—The Police Jury of Calcasieu Parish has awarded the contract for the construction of 60 bridges and culverts on various highways to HARRISON & BALM, Memphis, Tenn., at about $40,000. F. H. Frankland is Bridge Engr. Noted Dec. 24.

Clinton, Tenn.—The Anderson County Court has voted to build three bridges over the Clinch River, two to be located at Clinton and the other at Edgemoor.

Harriman, Tenn.—The Commissioners of Roane County, Kingston, are considering the construction of a bridge over the Emory River to connect Harriman and South Harriman.

Memphis, Tenn.—The Memphis & Arkansas Railway Bridge & Terminal Co. announces that financial arrangements for resuming work on the superstructure of its bridge over the Mississippi River have been completed, and it hoped that the structure may be completed by the end of this year. Noted Aug. 15 and 29, 1912; June 26, 1913, and Mar. 19, 1914.

✚**Nashville, Tenn.**—The Louisville & Nashville R.R. has awarded the contract for the construction of a 150-ft. reinforced-concrete bridge over the Franklin Pike south of Nashville, to the MEACHAM CONTRACTING CO., Nashville.

★**Chicago, Ill.**—(Official)—The following bids were received, Jan. 14, by the Sanitary District of Chicago for the steel superstructures of two highway bridges over the Calumet Sag Channel, (a) West 82nd St. Bridge, (b) Burr Oak Ave. Bridge: Central States Bridge Co., Indianapolis, Ind., (a) $4574, (b) $15,950; Lackawanna Bridge Co., Buffalo, N. Y., (a) $4306, (b) $14,467; Milwaukee Bridge Co., Milwaukee, Wis., (a) $4180, (b) $12,744; Chicago Bridge & Iron Co., (a) $3780, (b) $11,550, (probably awarded contract); Toledo Bridge & Crane Co., Toledo, Ohio, (a) $3898, (b) $13,400; Penn Bridge Co., Beaver Falls, Penn., (a) $4785, (b) $14,985; Fort Pitt Bridge Works, Pittsburgh, Penn., (a) $4190, (b) $13,100; Klemp, Simpson & Co., (a) $4879, (b) $15,275; Wisconsin Bridge & Iron Co., (a) $4495, (b) $13,760; McClintic-Marshall Co., Pittsburgh, (a) $4500, (b) $14,030; King Bridge Co., Cleveland, Ohio, (a) $4400, (b) $12,950; Strobel Steel Construction Co., (a) $4950, (b) $14,646; Hansell Elcock Co., (a) $3970, (b) $12,450; Kenwood Bridge Co., (a) $4004, (b) $14,004; Morava Construction Co., (a) $4253, (b) $13,445; American Bridge Co., (a) $4697, (b) $14,493. All bidders of Chicago unless otherwise stated. Noted Jan. 7.

Colona, Ill.—Plans have been completed for the construction of a bridge over the Rock River at Colona, to cost approximately $60,000, of which Rock Island and Henry Counties will each pay one-half. The bridge will be of the deck girder type, 20 ft. wide and about 760 ft. long. It is said that the plans will be finally approved at the March meeting of the county boards, after which bids will be asked for the construction of the bridge. Wallace Treichler, County Supt. of Highways, Rock Island, is Engr.-in-Charge.

Greenville, Ill.—Bids will be received until 11 a.m., Jan. 26, by the Town Clerk for a reinforced concrete bridge in Central Township, Bond County. The estimated cost is $6450. R. O. Young, Sorento, is Supt. of Highways of Bond County.

Pontiac, Ill.—It is reported that the Commissioners of Livingston County plan to build a new concrete bridge over the Vermillion River about three miles from Pontiac. The estimated cost is $10,000. R. W. Osborn is County Supt. of Highways.

Superior, Wis.—The Board of Public Works is receiving bids for repairs to the Lamborn Ave. Bridge. R. E. McKeogue is City Clk.

Superior, Wis.—Tentative plans have been prepared by E. B. Banks, City Engr., for the construction of a viaduct over the railway tracks at 21st Ave. The estimated cost of the structure is $89,000. It is expected that construction work wil begin in the early summer.

Mason City, Iowa—According to press reports, bids will be received in February by the Board of Supervisors of Cerro Gordo County for the construction of a concrete deck girder bridge over Calmus Creek on North Main St., to cost about $4500; bids will also be received for a number of small bridges, estimated total cost, $20,000. R. E. Robertson is County Engr.

Salina, Kan.—(Official)—Bids will be received until Feb. 2, by the Board of Commissioners of Saline County for the construction of a concrete bridge over the Smoky Hill River at Iron Ave., Salina. The estimated cost is $30,000. A. C. Anderson is County Clk. Wilmarth & Zerbe, Salina, are Engrs.-in-Charge. Noted Aug. 27, Nov. 12 and 26, Dec. 31.

Ayr, Neb.—It is reported that the Commissioners of Adams County, Hastings, have decided to build a bridge over the Little Blue River, south of Ayr. It will be about 250 ft. long.

Omaha, Neb.—The Boards of Commissioners of Douglas and Saunders Counties, acting jointly, have filed a request with the State Engineer for a state aid bridge over the Platte River about 1½ miles south of Yutan, Saunders County. The request is for a steel bridge. The estimated cost is $50,000.

Miller, S. D.—(Official)—The Board of Commissioners of Hand County has rejected all bids received, Jan. 8, for the construction and repair of county bridges during 1915. D. A. Lewis is County Audr. Noted Nov. 26.

✚**Livingston, Mont.**—The Board of Commissioners of Park County has awarded the contract for the construction of a steel bridge at H St. to the MINNEAPOLIS STEEL & MACHINERY CO., Minneapolis, Minn., at $6500.

Austin, Tex.—Press reports state that the city has had plans prepared by G. S. Iredell, Engr., for a reinforced concrete bridge over Shoal Creek at 10th St. It will be 28 ft. wide with two spans of 36 ft. each. The estimated cost is $4000.

Tucumcari, N. M.—The Board of Commissioners of Quay County has requested Junius W. Johnson, Asst. State Engr., to prepare plans for a pile bridge across Tucumcari Creek, about 18 miles from Tucumcari. These plans will be considered at the next meeting of the Board.

✚**Twin Falls, Idaho**—The Board of Commissioners of Twin Falls County has awarded the contract for the construction of a bridge over the Snake River near Murtaugh, to J. H. FORBES & CO., Caldwell, Idaho, at $5946. Noted Oct. 15.

✚**Hoquiam, Wash.**—The Northern Pacific Ry. has awarded the contract for the superstructure of a bridge over the Hoquiam River to McCREARY & WILLARD, Spokane, Wash. The work includes a 256-ft. steel draw span, a 70-ft. truss span and 90-ft. decking. Noted Dec. 24.

Seattle, Wash.—Bids will be received until 10 a.m., Jan. 25, by N. M. Wardell, Clk. Bd. of Comrs. of King County, for the construction of a bridge at 14th Ave. South.

Seattle, Wash.—(Official)—The approximate quantities required for the 15th Ave. Bridge over the Lake Washington Canal include 7000 cu.yd. concrete masonry, 1500 tons structural steel, 100 tons machinery, 3000 lin.ft. pile and timber trestle. The cost is estimated at $465,000.

From another source we learn that the Supreme Court of the State of Washington has recently decided that the bond issue of $829,000 for the construction of the Lake Washington Canal bridges was invalid, so it is improbable that bids for the work can be asked for some time. Noted Dec. 3 and 10, Jan. 7.

Tacoma, Wash.—The Chicago, Milwaukee & St. Paul Ry. has filed its application with the City Council for the permanent vacation of East T St., where the company will build a steel bridge about 150 ft. long, to cost about $50,000. E. O. Reeder, Seattle, is Asst. Ch. Engr.

✚**Fredericton, N. B.**—The Minister of Public Works has awarded contracts for the construction of two bridges in Queens County to W. R. FAWCETT, Temperance Vale, N. B., and ROBERT FORBES, Gibson, N. B., at approximately $3000 each.

London, Ont.—The ratepayers of the city have voted against a bylaw providing for the construction of a $40,000 bridge across Richmond St.

Regina, Sask.—The Board of Railway Commissioners has authorized the Works Department of the City Council to have plans prepared for the construction of a bridge over the Canadian Pacific Ry. tracks at Hamilton St. The plans are to be approved by the Bridge Engineer of the Canadian Pacific Ry. and the Railway Commissioners. F. McArthur is Engr. Noted July 30, 1914.

Vancouver, B. C.—The Railway Board of Commissioners has authorized the Kettle Valley Ry. to build three new bridges over the Coquihalla River. A. McCulloch, Penticton, B. C., is Ch. Engr.

Vancouver, B. C.—The Great Northern Ry. has filed plans with the City Engineers for the Clark Drive and Woodland Drive bridges over the Grandview cut, and for approach to the Commercial Drive Bridge from Eighth Ave. The estimated cost of this work is $350,000.

WATER SUPPLY—IRRIGATION

Boston, Mass.—Bids will be received until Jan. 27, by the Supply Department, for 7020 ⅝ to 3-in. water meters and for brass and composition castings for the Fire Department. D. Frank Doherty is Supt.

★**Fitchburg, Mass.**—(Official)—Bids will be received until 2 p.m., Mar. 2, by the Board of Water Commissioners, for constructing the Ashby reservoir for the Fitchburg water-supply system. Metcalf & Eddy, Boston, are Consult. Engrs. Thomas P. Sheldon is Comr. Noted Dec. 4, 1913, Jan. 8 and Dec. 3, 1914.

Salem, Mass.—Press reports state that the Water Commissioners of Salem and Beverly have had plans prepared for taking water from the Ipswich River as an additional supply. The estimated cost is $130,000. Noted Aug. 20.

East Hartford, Conn.—The citizens plan to construct a new dam and make improvements to the water system. The estimated cost is $30,000. John H. Walsh is Supt.

Batavia, N. Y.—The Common Council has appointed D. W. Tomlinson, Sr., and R. E. Chapin to supervise the installation of a water system. Water will be taken from the Tonawanda Creek and filtered mechanically.

✚**Buffalo, N. Y.**—The contract has been awarded to BUFFALO ELECTRIC CONSTRUCTION CO., at $48,900, for installing an electric plant at the Porter Ave. pumping station. Noted Dec. 24.

★**Middletown, N. Y.**—(Official)—Bids will be received until 4 p.m., Feb. 20, by J. C. Degnan, Comr. of Pub. Safety, Middletown, for laying 20-in. c.-i. water mains. For details see advertisement under "Contracts To Be Let."

Newark, N. Y.—The citizens contemplate installing a 1,080,000-gal. centrifugal pump with a 200-ft. head, a 10x12-ft. air compressor and 125-hp. automatic steam engines. S. Starth is Supt.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received until 3 p.m., Jan. 28, by the Park Board, for c.-i. water pipe, and gates for Prospect Park. Cabot Ward is Pres., Comrs. of Park.

North Tonawanda, N. Y.—Bids will be received until Jan. 25 by John B. Batt, Supt. of Water Wks., for installing a chlorination plant at the water-works. Noted Aug. 6.

✚**Atlantic City, N. J.**—The contract for making improvements at the Absecon pumping station has been awarded by the Board of Commissioners to EDWIN L. BADER, Bartlett Bldg., Atlantic City, at $20,367. Bids opened Dec. 31. Noted Dec. 24.

Camden, N. J.—Charles H. Ellis, Mayor, in a message to the City Council, urges the installation of a high pressure water system along the river front.

Gloucester, N. J.—The City Council plans to make improvements to the water system. E. Aden Powell is Eng

Hawthorne, N. J.—(Official)—Bids will be received until 8:15 p.m., Jan. 29, by the Commissioners for approximately 3150 ft. of 14-in., 12,460 ft. of 12-in., 20,900 ft. of 8-in. and 47,180 ft. of 6-in. c.-i. pipe. John A. Shea is Borough Clk.

Jersey City, N. J.—Bids will be received until 2 p.m., Jan. 28, by the Board of Commissioners, for special castings, hydrant connections, plugs, caps, sleeves, half-sleeves and any other special castings which may be required, except water gate boxes and covers and manhole heads and covers.

Jersey City, N. J.—(Official)—Bids will be received until 2 p.m., Jan. 28, by the Board of Commissioners, for valves for the water system from date of contract to Nov. 30, 1915. Michael I. Fagan is City Clk.

Jersey City, N. J.—(Official)—Bids will be received by the Board of Commissioners until 2 p.m., Jan. 28, for water gate boxes and covers and manhole heads and covers.

Gallitzin, Penn.—(Official)—Plans are being prepared for the construction of a municipal water system, estimated to cost $50,000. The time for receiving bids has not yet been set. D. W. Dillman is Borough Engr. Noted Dec. 10.

Indiana, Penn.—The Clymer Water Co. contemplates constructing a new pumping station. W. S. Hamilton is Supt.

Harrisonburg, Va.—The city contemplates building a filtration plant at an estimated cost of $40,000.

Saint Marys, W. Va.—The city plans to construct a reservoir, estimated to cost $8000. J. H. McBride is City Recdr.

✚**Asheville, N. C.**—Bids will be received until Feb. 12 by the city for laying 6000 ft. of water pipe and for grates and hydrants. F. L. Conder is City Clk. Noted Jan. 7.

Durham, N. C.—Plans have been prepared by Gilbert C. White, Engr., and submitted for the construction of a water system. The estimated cost is $450,000. Noted May 7 and June 4.

★**Tampa, Fla.**—(Official)—Bids will be received until noon, Feb. 15, by the Tampa Water Co., Charles R .McFarland, Gen. Mgr., for constructing a reinforced-concrete reservoir. For details see advertisement under "Contracts To Be Let." Noted July 16 and Jan. 7.

✚**Plaquemine, La.**—The contract for constructing a water system has been awarded to BASH & JAMES, Kansas City, Mo., at $35,790. Bids opened Jan. 5. Noted Nov. 26 and Dec. 24.

Bowling Green, Ohio—(Official)—The contract has been readvertised and bids will be received until noon, Feb. 12, by D. C. Brown, Secy., Bd. of Trustees of Bowling Green, State Normal College, Bowling Green, for constructing a fireproof building, stack, tunnel system, water system and softening plant, steam mains and pumps. Noted Dec. 17.

Chicago Junction, Ohio—The installation of a 2,000,000-gal. crank and flywheel pump and a crank and flywheel air compressor is contemplated by the city. Robert B. Smith is Supt.

Cincinnati, Ohio—(Official)—Bids will be received until noon, Jan. 29, by the Director of Public Safety, for hub and spigot pipe, flange pipe, special castings and miscellaneous castings; valves and fire hydrants for the high-pressure fire system. Edward P. Durr is Secy.

Cleveland, Ohio—(Official)—Bids were received Dec. 18, by the Commissioner of Purchases and Supplies, for fire hydrants as follows: R. D. Wood & Co., Philadelphia, Penn., $25,545; Kennedy Valve Mfg. Co., Elmira, N. Y., $26,384 and Roe Stephens Mfg. Co., Detroit, Mich., $27,200. Noted Dec. 10.

✚**Cleveland, Ohio**—The contract for three steam-turbine, reduction-gear driven-centrifugal pumps for the Division Ave. pumping station has been awarded to DRAVO-DOYLE CO., Pittsburgh, Penn., at $129,667. Bids were opened Dec. 24. Noted Jan. 7.

Shadyside, Ohio—An election will be held Feb. 9 to vote on the question of issuing bonds for $45,000, the proceeds of which will be used for the construction of a water system. Noted Dec. 24.

Springfield, Ohio—Press reports state that bids will be received until Feb. 6 by the Building Commission for Infirmary Buildings, at office of County Auditor, Springfield, for constructing a water system for the new County Infirmary, Bethel Township. George McCord is Pres. Noted Oct. 29.

Woodsfield, Ohio—The Woodsfield Water Co. plans to install a mechanical filtration plant in the spring. The estimated cost is $7000. R. W. McKinney is Gen. Mgr.

✚**South Bend, Ind.**—The contract for c.-i. pipe and specials for the year 1915 for the water department has been awarded to LYNCHBURG FOUNDRY CO., Lynchburg, Va., at $21.75 per ton for c.-i. pipe and 2½c. per lb. for specials. Bids opened Dec. 30. Noted Dec. 17.

Redford, Mich.—(Official)—Bids will be received until 8:30 a.m., Feb. 1, by John Venus, Clk., for constructing a water system. Russell A. Murdock, 706 Free Press Bldg., Detroit, is Engr.

Joliet, Ill.—Bids will be received until Feb. 1 by Henry Odenthal, City Clk., for constructing a reservoir. Noted Nov. 12 and Dec. 3.

✚**Wilmington, Ill.**—The contract for constructing an elevated steel tank has been awarded to GLASGOW-McCANN CO., Joliet, at $4875. Noted Nov. 26.

Clintonville, Wis.—The citizens plan to install a 144,000-gal. direct connected to three-phase, 2200-volt motor at the waterworks. George D. Stewart is Supt.

✚**St. Paul, Minn.**—The contract for meters for the water system has been awarded by the Purchasing Committee to HENRY R. WORTHINGTON, New York, N. Y.: 2500 ⅝-in. meters, $5.35; 300 ¾-in., $7.70, and 85 2-in., $35. Noted Dec. 17.

Fairview, Mont.—The Council contemplates spending $40,000 for the construction of water and sewer systems.

Joplin, Mo.—Hugh McIndoe, Mayor, has been authorized by the Council to retain engineers to prepare plans for the construction of a municipal water system. Noted Oct. 8.

St. Louis, Mo.—Bids will be received until noon, Jan. 22, by the Board of Public Service for a 20,000,000-gal. steam turbine-driven centrifugal pump.

Slater, Mo.—T. C. Brooks & Son have been granted a franchise to construct and operate a water system. L. E. Shepherd is Supt.

Murfreesboro, Ark.—The Williams & Freeman Water & Light Co. has been incorporated with a capital of $10,000. J. E. Williams is Pres.

Rector, Ark.—(Official)—Bids will be received until Feb. 3 by J. C. Rogers, Chn. Bd. of Comrs., Water Imp. Dist. No. 1, for 10-in. wells. Frank L. Wilcox, Syndicate Trust Bldg., St. Louis, Mo., is Consult. Engr.

✚Corpus Christi, Tex.—(Official)—Bids were received Jan. 8, for constructing a water system, as follows: LOUIS LOCK, Monroe, La., at $286,211 (awarded contract); Commercial Construction Co., $270,019; Foley Construction Co., $261,604; Fordon & Taylor Construction Co., $79,833 (all for steel pipe); Howard Construction Co., $300,160; Sherman Machine & Iron Works, $306,165; The Sykes Co., $319,640; and Tankawa Construction Co., $326,776 (c.-i. pipe). Noted Dec. 3 and 24.

Jacksonville, Tex.—The city contemplates building two impounding reservoirs, one on Pierce Branch and the other on Churchill Branch.

Cordell, Okla.—The city plans to spend $75,000 for the improvement of the water system. T. B. Wolford is Supt. Noted Mar. 19.

Dustin, Okla.—The citizens plan to spend $6000 to make extensions to the municipal water system.

Enid, Okla.—Bonds for $50,000 were voted at an election held Jan. 14, according to press reports. The proceeds will be used for the extension of the water system. Peter Bowers is Mayor.

Yale, Okla.—At an election held Dec. 31, the citizens voted in favor of issuing $32,000 in bonds, the proceeds of which will be used for the improvement of the water system and the construction of an electric-light plant. E. A. Pierson is Clk. Noted Oct. 22 and Dec. 24.

Ogden, Utah—Washington Jenkins, City Engr., is preparing plans for the extension of the water supply mains from Coldwater Cañon to the artesian wells in the Ogden Valley.

✚Modesto, Calif.—The contract has been awarded by the Board of Directors of the Modesto Irrigation District, to E. K. FINNEY, at $12,464, for constructing the Curtis and Sproul canals. Noted July 9.

San Diego, Calif.—Plans have been completed by H. A. Whitney, City Hydraulic Engr., for the construction of the Bonita pipe line, to extend from the Otay main to 13th and H St., San Diego. The main will be 28-in. steel pipe with the necessary valves and fittings, and will be 40,500 ft. long. Noted Sept. 21.

Santa Paula, Calif.—The Pleasant Valley Lemon Co. plans to construct an irrigation system, estimated to cost $100,000. S. B. Kingsbury is Pres. and A. C. Hardison is Engr.

✚Montreal, Que.—(Official)—The contract for constructing the Elgin basin pumping station has been awarded to T. F. DWYER, 414 Merchants Bank Bldg., Montreal, at $6082. Bids opened Jan. 12. Noted Jan. 7.

Aurora, Ont.—At an election held Jan. 4, the citizens voted in favor of issuing $8000 in bonds, the proceeds of which will be used for the construction of a water system.

Essex, Ont.—Bonds for $6500 were voted at a recent election by the citizens. The proceeds will be used for the improvement of the water system. Noted Jan. 14.

Fort William, Ont.—The Town Council plans to spend $5000 for making extensions to the water system. R. R. Knight is City Engr.

Athens, Greece—(Official)—A book in French and Greek, describing the proposed construction of a water and a sewer system for Athens and the Piræus, is on file with E. C. Porter, 409 Custom House, New York, N. Y. The concession is for 70 years. Work is to be started 20 days after ratification and completed in 12 years. S. Schliemann, Washington, D. C., is diplomatic representative of Greece to this country. Noted Jan. 7.

SEWERS

Boston, Mass.—Bids will be received until noon, Jan. 22, by Frank Doherty, Supt. of Supplies, for iron castings for manhole and catch-basin frames.

Boston, Mass.—Bids will be received until Jan. 26, by the Public Works Department, for constructing sewers in South, East, Kingston and Albany St. L. K. Rourke is Comr. Noted Nov. 12.

✚Boston, Mass.—(Official)—The contract for the construction of the Faneuil Brook Valley Conduit was awarded by the Public Works Department to HENRY F. SPINACH, at $16,584. Other bids were: Anthony Cefalo, $16,661; J. Landis, $17,194; McCarthy & Walsh, $17,297; M. de Sisto, $17,391; J. J. Conway, $17,391; West Roxbury Trap Rock Co., $17,567; M. H. Kelley, $17,962; J. Driscoll & Son, $17,979; Merrimac Construction Co., $18,149; Anthony Barufaldi, $18,449; William L. Dolan, $18,979; and John McCourt & Co., $22,540. L. K. Rourke is Comr. Noted Dec. 17.

✚Boston, Mass.—(Official)—Bids were received for constructing the Dent. St. brook sewer in West Roxbury District as follows: MERRIMAC CONSTRUCTION CO., at $25,466 (awarded contract); West Roxbury Trap Rock Co., $25,758; Peter Bompano Co., $28,008; James J. Conway, $29,272; Henry Spinach Contracting Co., $30,507; McCarthy & Walsh, $30,779; Michael Meehan, $30,946; M. de Sisto, $31,527; Antony Baruffaldi, $31,157; John Landis, $32,237; Charles Latorella, $33,495; Martino de Matteo, $33,758; Antony Cefalo, $33,894; William J. Barry, $34,170; Peter W. Hill, $34,170, and James Driscoll & Son Co., $35,029. L. K. Rourke is Comr. of Pub. Wks.

Hartford, Conn.—Bids will be received until 11 a.m., Jan. 26, by the Board of Contract and Supply, for constructing 2000 ft. of 10-, 15-, 18- and 20-in. sewers in Franklin Ave., Montowese St. and Victoria Rd.

Huntington, N. Y.—An ordinance has been adopted by the Town Board for the establishment of a new sewer district. The estimated cost is $98,000. George W. Fuller, 170 Broadway, New York, N. Y., is Engr. Noted Dec. 17.

New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received until 2 p.m., Jan. 28, by Marcus M. Marks, Pres., Borough of Manhattan, for changing sewers in various streets.

New York, N. Y.—(Borough of Queens)—(Official)—Bids will be received until 11 a.m, Jan. 28, by Maurice E. Connolly, Pres., Borough of Queens, for constructing sewers in various streets.

Rochester, N. Y.—According to press reports, plans are being prepared by Edwin A. Fisher, Rochester, for the construction of an auxiliary sewage-disposal plant for the Brighton Section. The estimated cost is $80,000.

Camden, N. J.—The City Council has passed an ordinance authorizing the construction of sewers in Louis, 26th St. and Harrison Ave. William D. Brown is Clk. Noted Dec. 24.

Jersey City, N. J.—George A. Johnson, New York, N. Y., has been retained as Consult. Engr., to prepare plans for the construction of a sewage disposal works. The money is not yet available. Noted Jan. 7.

Trenton, N. J.—Hering & Gregory, Engrs., New York, N. Y., have prepared plans, according to press reports, for the construction of a sewage-disposal plant and a sewage-pumping station. The estimated cost is $400,000.

Johnstown, Penn.—A report has been completed by Clark P. Collins, Engr., on the installation of a sewer system and sewage-disposal plant. The estimated cost is $353,383.

★Philadelphia, Penn.—(Official)—Bids will be received by M. L. Cooke, Dir., until noon, Feb. 4, for constructing a main sewer in Indiana St. The estimated cost is $200,000. For details see advertisement under "Contracts To Be Let."

Wilmington, Del.—An ordinance has been adopted by the City Council authorizing a bond issue of $75,000, the proceeds of which will be used for improvement to the sewer system. H. W. Howell is Mayor.

✚Baltimore, Md.—(Official)—Bids were received by the Sewerage Commission for construction of sewers in Dist. 5-B under Contract 141 as follows: B. F. SWEETEN & SONS, $63,825 (awarded contract); M. O'Herron & Sons, $66,862; Slack & Slack, $68,333; Carozza Bros. & Co., $68,718; P. A. Rose, $69,262; Albert J. Boyle, $70,183; D. M. Andrews Co., $72,046; Gallagher & Bryan, $75,724; Ryan & Reilly Co., $76,854, and James Ferry & Sons, $78,524, and for Contract No. 142 for Section 3 of the Jones Falls Interceptor as follows: M. O'HERRON & SONS, $35,941 (awarded contract); Slack & Slack, $36,053; Ryan & Reilly, $39,694; James Ferry & Sons, $43,132, and Gallagher & Bryan, $43,302.

Columbia, S. C.—Bids will be received until 10 a.m., Jan. 29, by F. C. Wyse, Supt., for constructing 10 miles of sewers. Noted Jan. 7.

West Palm Beach, Fla.—Bids received Jan. 5 by the City Council for constructing sewers have been rejected. The contract will soon be readvertised for this work. The J. B. McCrary Co., Atlanta, Ga., is Engr. Noted Nov. 23 and Dec. 31.

Birmingham, Ala.—An ordinance has been adopted by the City Commission for the construction of a sanitary sewer in the Enon Ridge District. The estimated cost is $12,500. Julian Kendrick is City Engr.

Bellaire, Ohio—According to press reports, bonds for $15,897 have been sold, the proceeds of which will be used for sewer and street work.

Brewster, Ohio—According to press reports, bonds have been sold, the proceeds of which will be used for constructing a sanitary sewer system. Noted Dec. 24.

★Cambridge, Ohio—(Official)—Bids will be received by J. B. Clark, Dir. of Pub. Ser., until noon, Feb. 11, for sewer and street paving work. The estimated cost is $7000. For particulars see advertisement under "Contracts To Be Let."

Cincinnati, Ohio—(Official)—Bids will be received by Philip Fosdick, Dir. of Pub. Ser., until noon, Jan. 27, for the construction of main and lateral sewers in District No. 2.

✚Cleveland, Ohio—Press reports state that the contract for constructing a sewer in East 93d St., from Carr Ave., N. E., to Lake Erie, has been awarded to WALTER P. GIBBONS, at $48,823. Noted Dec. 24.

Hamilton, Ohio—Press reports state that plans have been submitted by Frank Weaver, City Engr., for the construction of sanitary sewers in East Hamilton and Lindenwald.

Kent, Ohio—At a recent election the citizens voted in favor of issuing $90,000 in bonds for constructing a portion of a sanitary sewer system.

Lancaster, Ohio—Bids will be received by John A. Mayer, Dir. of Pub. Ser., until Jan. 28, for constructing a sewer in Wheeling St.

✚Lorain, Ohio—(Official)—The contract for constructing a sanitary sewer in East 35th St., from Clifton to Dallas Ave., has been awarded to RANDALL & COOPER, Lorain, at $7092. Noted Dec. 24.

✚Fort Wayne, Ind.—Press reports state that the contract for constructing a main sewer in the southeastern section of the city has been awarded to the S. G. SHEETS CO., South Bend, at $38,531. Noted Nov. 26.

✚Indianapolis, Ind.—The contract for constructing a sewer in Warman Ave., from Morris St. and Eagle Creek to Tibbs Ave., has been awarded to the SHEEHAN CONSTRUCTION CO.

✚North Chicago, Ill.—A contract has been awarded to ANTON DUDEK, at $13,630, for constructing sewers in Lincoln, South Victoria, 12th, 13th and 14th St.

Rockford, Ill.—Press reports state that bids will be received by W. W. Bennett, Pres. of the Bd. of Local Improvt., until Jan. 27, for constructing the Southeast End sewer District.

★**Milwaukee, Wis.**—See item under Miscellaneous: Sewers.

✚**Clinton, Iowa**—Press reports state that the contract for constructing a sewer in Fourth St. has been awarded to A. R. COFFEE, Decorah, at $5168. Noted Oct. 1.

Kenwood, Iowa—According to press reports the City Council contemplates constructing a sewage disposal plant, estimated to cost $25,000.

Postville, Iowa—Bids will be received until 7.30 p.m., Jan. 29, for the sale of $20,000 of the $25,000 in bonds which were voted Oct. 12. The proceeds will be used for the installation of a sewerage system. Noted Oct. 8 and Nov. 12.

Mitchell, S. D.—(Official)—Bids will be received until 8 p.m., Feb. 1, by Thomas Eastcott, City Audr., for constructing a lateral sewer.

Caruthersville, Mo.—According to press reports an election will be held Jan. 26, to vote on the question of issuing $32,000 in bonds for extending the sewer system.

Houston, Tex.—(Official)—Bids will be received by E. E. Sands, City Engr., until 2 p.m., Jan. 25, for the construction of reinforced-concrete collecting tanks. Estimated cost, $6600. Noted Nov. 12.

★**San Antonio, Tex.**—Official)—Bids will be received by Fred Fries, City Clk., until 4 p.m., Feb. 1, for the construction and completion of sanitary and storm water sewers. The contract was previously let to W. G. Schuwirth Co. For particulars see advertisement under "Contracts To Be Let." Noted Nov. 26.

San Benito, Tex.—Press reports state that an election will be held Feb. 2, to vote on the question of issuing $8000 in bonds for the construction and improvement of the sewage disposal plant and the streets.

Tulsa, Okla.—According to press reports the City Council contemplates extending the sanitary and storm systems, at an estimated cost of $12,000 and $80,000 respectively. T. C. Hughes is City Engr.

Portland, Ore.—The only bid received by the City Commission for the reconstruction of the East Alder St. sewer was that of Giebisch & Joplin, at $23,969.

Eureka, Calif.—According to press reports plans will be prepared by G. A. Strand, City Engr., for the construction of septic tanks to take care of the sewage emptying into Elk River.

✚**San Francisco, Calif.**—The Board of Public Works has awarded a contract for the construction of a sewer in 19th Ave., from Noriega St. to 20th Ave., to KARL EHRHART, at $49,984.

Santa Monica, Calif.—Press reports state that John Morton, City Engr., has prepared plans for a system of storm sewers, estimated to cost $225,000. Noted Dec. 3.

Sierra Madre, Calif.—According to press reports the City Trustees contemplate constructing a sewer system in Cañon Park. W. F. Bixby, 502 Mason Bldg., Los Angeles, is City Engr.

GARBAGE

Shelton, Conn.—Bids will be received until Feb. 9, by George E. Barlow, Warden, for the removal and disposal of ashes and garbage in Shelton Borough.

New York, N. Y.—(Borough of Queens)—(Official)—Bids will be received by Maurice E. Connolly, Borough Pres., until 11 a.m., Jan. 29, for the general construction of a destructor plant at Flushing Ave., near Metropolitan Ave., Ridgewood. The amount of security required is $30,000.

✚★**Hibbing, Minn.**—The contract for the installation of a garbage incinerator has been awarded to the McGUIRE INCINERATOR CO., Chicago, at $9500. Noted Dec. 31, Jan. 14 and 21.

Joplin, Mo.—Press reports stated that J. Fricke, St. Louis, contemplates the construction of an incinerating plant.

Fresno, Calif.—E. M. Prescott, of the Fresno Brick & Tile Co., has made a proposition to the city, agreeing to build a garbage incinerator to cost $60,000, if the city will grant him the privilege of the collection and disposal of garbage.

STREETS AND ROADS

Boston, Mass.—Press reports state that the City Council contemplates the widening of Exchange St., from 25 to 60 ft., Channey St., from 40 to 70 ft. and Arch St. from 50 to 70 ft. L. K. Rourke is Comr. of Pub. Wks.

East Providence, R. I.—(Official)—Bids will be received by the Town Council until 8 p.m., Feb. 2 for 100,000 granite blocks to be delivered at Fox Point, R. I.

✚**Arcade, N. Y.**—Press reports state that the contract for paving East Main, Liberty, Church and Park St. with brick has been awarded to F. M. FOOTE.

Lockport, N. Y.—Bids will be received by the Board of County Supervisors until Jan. 23, for constructing Lewiston Rd. or Chestnut Ridge County Rd. No. 14 in Royalton Township and for the Quaker Rd., or County Rd. No. 15 in Hartland and Somerset Townships.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by L. H. Pounds, Pres. of the Borough of Brooklyn, until 11 a.m., Jan. 27, for improving Front St., from Adams to Bridge St., Hicks St., from Warren to Harrison St., Hudson Ave., from Nassau St. to Dekalb Ave., and 95th St., from Ridge Blvd. to Third Ave.

✚**Syracuse, N. Y.**—The contract for paving North Crouse Ave. from Burnet Ave. and Lodi St. has been awarded to GUY B. DICKISON at $5536.

Crosswicks, N. J.—(Official)—Bids were received Jan. 16, for constructing the Chesterfield-Jacobstown Rd. with macadam and a bituminous dressing as follows: Thomas J. Barrett, Roebling, N. J., $25, 725; J. F. Shanley Co., Philadelphia, Penn., $33,610; Paul J. Snyder Co., Philadelphia, Penn., $24,679; B. Frank Stratton, Trenton, N. J., $27,974; R. Hafeman, Freehold, N. J., $23,861; Kelley-McFeeley Co., Camden, N. J., $29,950; The Juniata Co., Philadelphia, Penn., $29,920; Charles A. Ried Co., Trenton, N. J., $27,278; Joseph Jingola, Trenton, N. J. $23,365; J. L. Le Compt, Lakewood, N. J., $23,890. Noted under Chesterfield, Jan. 14.

Jersey City, N. J.—According to press reports bids will soon be received by the City Commission for improving Pollock Ave. from West Side to Mallory Ave., Sheffield St. from Ocean to Rutgers Ave. and Brown Pl.

New Brunswick, N. J.—The Board of Freeholders will receive bids until 2:30 p.m., Jan. 25, for the construction of a concrete pavement on the Roosevelt-Woodbridge Rd., Section 3, from Vernon Way to Woodbridge Ave. Alvin B. Fox, Perth Amboy, is County Engr. Noted Dec. 10.

Greensburg, Penn.—Bonds to the amount of $250,000 have been sold, the proceeds of which will be used for building roads throughout Westmoreland County.

✚**Richmond, Va.**—The contract for completing extension of Grace St. has been awarded to H. H. GEORGE, at approximately $20,000.

Clearwater, Fla.—Press reports state the City Council contemplates an expenditure of $40,000 for street paving. A bond issue of $15,000 for street paving was voted Oct. 6. J. N. Drew is City Engr. Noted Sept. 3.

Eustis, Fla.—Press reports state that an election will be held Feb. 2 to vote on the question of issuing $35,000 in bonds for paving and constructing storm sewers. I. N. Kennedy is Mayor.

✚**Fort Pierce, Fla.**—A contract for completing the road south from Fort Pierce has been awarded by the Commissioners of St. Lucie County to J. G. COATS & CO., Fort Pierce, at $14,000.

Tallahassee, Fla.—Press reports state that A. H. Williams, City Clk., will receive bids until Feb. 1, for the sale of $34,000 in bonds for grading, curbing and paving.

✚**Titusville, Fla.**—The contract for constructing roads has been awarded to BENJAMIN AKERMAN, Titusville, at $5133.

Magnolia, Miss.—Bonds for $100,000 have been sold by the Commissioners of Pike County, the proceeds of which will be used for constructing roads.

✚**Alexandria, La.**—The contract for resurfacing Third St. from Elliott to Bellier St. has been awarded to GAILEY & CLARK. Noted Dec. 31.

✚**Chattanooga, Tenn.**—The contract for improving Main St. in North Chattanooga has been awarded to the NOLL CONSTRUCTION CO., at $12,513.

Louisville, Ky.—Bids will be received by the Louisville Bd. of Pub. Wks. until Jan. 27, for the reconstruction of Market St. from Jackson to Hancock St., and Lytle St., from 15th St. east, with vitrified block. The estimated cost is $5500.

Akron, Ohio—Bids will be received by James McCausland, City Audr., until noon, Feb. 8, for the sale of $105,325 in bonds for street improvements.

Ashtabula, Ohio—Press reports state that bids will be received by M. H. Turner, Dir. Pub. Ser. for paving South Ridge Rd., estimated to cost $44,870.

Bellaire, Ohio—Bids will be received by R. S. Crow, City Audr. until Jan. 25 for the sale of $30,627 in bonds for paving, curbing and otherwise improving North Jefferson St.

★**Cambridge, Ohio**—(Official)—See item under "Sewers."

✚**Cincinnati, Ohio**—(Official)—The contract for improving Niles Ave. from Delta to Hairpin Ave. with brick has been awarded to WAGNER & BREHNING, Cincinnati, at $4340. Noted Dec. 24.

Cincinnati, Ohio—(Official)—Bids will be received by William Leimann, City Audr. until noon, Feb. 11 for the sale of $280,000 bonds for improving streets and roads.

Hamilton, Ohio—Press reports state that the City Council contemplates paving North Second, North Eighth, North Ninth, Washington, Buckeye, South Sixth and South Seventh St.

Lima, Ohio—Bids will be received by the County Commissioners until Jan. 30, for improving North West St. from Murphy St. to Robb Ave. H. J. Lawlor is County Audr.

Mt. Gilead, Ohio—(Official)—Bids will be received by the Commissioners of Morrow County until 11 a.m., Jan. 29, for the construction of the Mozier-Gruber Rd. in Canaan Township. C. O. Higgins is County Audr.

Paulding, Ohio—(Official)—Bids will be received by Edward McGaharan, County Audr. until 1 p.m., Feb. 24 for constructing 37,146 lin.ft. of earth road.

Port Huron, Ohio—Bids will be received by Albert P. Ryan, Clk. of the Bd. of Rd. Comrs., until Feb. 11 for building 3½ miles of class E. macadam road.

Springfield, Ohio—Press reports state that plans are being prepared by M. J. Bahin, City Engr. for the improvement of a number of streets.

✚**Troy, Ohio**—The Board of Control has awarded the contract for paving South Walnut St., to HENNESSY BROS., Piqua at $9500.

Troy, Ohio—Bids will be received by Henry J. Beck, Dir. Pub. Ser. until Jan. 27 for paving Market St.

Indiana—(Official)—Bids will be received as follows for road construction in Indiana:

Wabash, until 1:30 p.m., Feb. 2, by the Commissioners of Wabash County, for constructing a macadam road in Liberty Township. D. Showalter is Audr.

Vincennes, until 2 p.m., Feb. 2, by the Commissioners of Knox County, for constructing four gravel roads. Joseph I. Muentzer is Audr.

Muncie, until 10 a.m., Feb. 3, by the Commissioners of Delaware County, for constructing gravel roads in Delaware, Washington and Union Townships. F. M. Williams is Audr.

Shelbyville, until 11 a.m., Feb. 3, by the Commissioners of Shelby County, for constructing a road in Noble Township. F. W. Fagel is Audr.

Muncie, until 10 a.m., Feb. 3, by the Commissioners of Delaware County, for constructing three gravel roads in Harrison Township. F. M. Williams is Audr.

Evansville, until 10 a.m., Feb. 4, by the Commissioners of Vanderburg County, for constructing a rock road in Center Township. C. P. Beard is Audr.

Bloomington, Ind.—(Official)—Bids will be received by the Commissioners of Greene County until 2 p.m., Feb. 9, for the construction of a macadamized road in Washington Township. G. E. Kidd is Audr.

✚Columbus, Ind.—A contract for constructing a county line road has been awarded by the Commissioners of Bartholomew and Decatur Counties to G. T. NUGENT, Hartsville, Ind., at $6940.

Indianapolis, Ind.—(Official)—Bids will be received by the Board of Public Works until 10 a.m., Jan. 25, for 500,000 gal. of road oil.

✚Plymouth, Ind.—(Official)—A contract for constructing 11 gravel roads has been awarded by the Commissioners of Marshall County to H. N. BARNES & CO., at $86,762.

✚Spencer, Ind.—A contract for constructing a limestone road in Franklin Township has been awarded by the Commissioners of Owen County to HICKMAN & McBRIDE, Freedom, Ind., at $12,673.

Detroit, Mich.—The Park Commissioners have estimated the cost of resurfacing 7½ miles of boulevard at $350,000.

✚Escanaba, Mich.—A contract for grading, ditching and macadamizing the Manistique trunk road has been awarded to BICHLER BROS., Gladstone, Mich.

Pontiac, Mich.—(Official)—Bids will be received by the Board of County Road Commissioners until 10 a.m., Jan. 23, for building 4¾ miles of concrete road on Woodward Ave. from Royal Oak and Birmingham Villages.

✚Paris, Ill.—The contract for paving East Union St. from Main to Buena Vista St. has been awarded to ALAN J. PARRISH, at $7901.

✚Kenosha, Wis.—The C. PETERSON CONSTRUCTION CO. has been awarded a contract for paving Ridge St. at $20,000. Noted Dec. 24.

Clarinda, Iowa—Press reports state bids will be received by T. A. Wilson, City Clk. until Mar. 15 for paving Chestnut, Grant and Water St. M. G. Hall, Centerville, Iowa is Engr.

✚Manning, Iowa—A contract for 25,785 sq.yd. of paving and 9521 lin.ft. of curbing has been awarded to C. L. MOSHER, Sioux City, Iowa, at $58,623.

Marshalltown, Iowa—Press reports state that bids will be received by J. J. Wilson, City Clk., until Feb. 15, for paving a number of streets.

✚Independence, Mo.—A contract for grading and draining six miles of the Blue Mills and Sibley Rd. has been awarded to the DAVIDSON CONSTRUCTION CO., at $13,987.

St. Louis, Mo.—Frank W. Buffum, State Highway Comr., has employed an engineer in St. Louis to establish lines and right-of-way for the proposed eastern branch of the Red Ball improved roadway to be constructed between St. Charles and Clarksville.

✚Fort Worth, Tex.—A contract for constructing 100,000 sq.yd. of asphaltic concrete pavement has been awarded to the ROACH & MANIGAN CO., Memphis, Tenn., at $235,000.

Greenville, Tex.—Bids will be received by the Board of Permanent Road Commissioners until Jan. 27, for the construction of a system of highways in Road District No. 1. Julian C. Field, Greenville is Consulting Engr.

Sutherland Springs, Tex.—Press reports state that, at a recent election, the citizens voted to issue bonds for road construction.

Mountain Home, Idaho—The County Commissioners contemplate building a six-mile road from Mountain Home to Bruneau, estimated to cost $15,000.

Morton, Wash.—Press reports state that plans are being prepared for the improvement of Main St. from Railroad to Third St.

Olympia, Wash.—Press reports state that plans are being prepared by W. H. Yeager, County Engr. for the completion of the Stanke Rd.

✚Seattle, Wash.—The City Council has awarded a contract for highway construction to W. W. WILCOX, Sunnydale, Wash., at $30,866.

Seattle, Wash.—Bids will be received by A. P. Denton, County Engr., until Feb. 10, for grading 20 miles of road from Auburn to Enumclaw, estimated cost $8000 and ten miles of road from Renton and Issaquah, estimated cost $70,000.

✚Fresno, Calif.—The CALIFORNIA ROAD & STREET IMPROVEMENT CO. has been awarded the contract at approximately $40,000 for paving K St.

✚Longbeach, Calif.—The LOS ANGELES PAVING CO., 406 H. W. Hellman Bldg., Los Angeles, has been awarded the contract at $35,914 for improving American Ave. from Sixth to Anaheim St.

Sacramento, Calif.—(Official)—Bids will be received until 2 p.m., Feb. 1, by the State Highway Commission, 515 Forum Bldg., for the construction of a state highway in Butte County, from Nelson to Chico, about 12.6 miles long.

San Francisco, Calif.—The Board of Public Works will soon receive bids for paving Corbett Ave., from Danvers St. to Caselli Ave., the estimated cost of which is $19,000; and grading Pennsylvania Ave., from 20th to 22nd St., the cost of which is estimated at $22,000.

✚Maisonneuve, Que.—The contract for grading and paving Pius IX Blvd. has been awarded to the FEDERAL ENGINEERING & CONTRACTING CO., Montreal at $96,000. Noted Dec. 17.

INDUSTRIAL WORKS

Boston, Mass.—Arthur A. Vinol, Arch., has prepared plans for the construction of a four-story, 90x112-ft. garage on West Dedham St., for the Tremont Realty Corporation. The estimated cost is $80,000.

Buffalo, N. Y.—The Eastern Grain, Mill & Elevator Corporation recently incorporated with a capital of $1,000,000 will construct a grain elevator along the Buffalo River. The plant will have a capacity of 1,000,000 bu.

New York, N. Y.—(Borough of Bronx)—Plans have been prepared by Edward J. Byrne, Arch., 3029 Third Ave. for the construction of a one-story, brick and stone garage on Southern Blvd. near East 163rd St. Estimated cost, $30,000.

New York, N. Y.—(Borough of Bronx)—Paul C. Hunter, Arch., 191 Ninth Ave., New York, is preparing plans for alterations and additions to the four-story garage on Washington near Tremont Ave., for the Tremont Garage Co. Estimated cost, $12,000.

New York, N. Y.—(Borough of Brooklyn)—The Knickerbocker Ice Co., 1480 Broadway will construct a three-story, 74x160-ft., storage and stable at Bond and Fourth St. Estimated cost, $50,000. Mortenson & Co., 405 Lexington Ave., New York, are Archs.

New York, N. Y.—(Borough of Brooklyn)—L. Schepp, Hudson and Duane St., New York, contemplates the construction of a 100x136-ft., factory at 191-205 Washington and Concord St., Brooklyn.

✚New York, N. Y.—(Borough of Queens)—The contract for the construction of a one-story, 70x100-ft. garage, on Hillside Ave., Jamaica, L. I., for D. Koster, Huron St., has been awarded to H. WOOD, 258 Halsey St., Brooklyn. Estimated cost, $10,000.

New York, N. Y.—(Borough of Richmond)—The Mexican Petroleum Co., has had tentative plans prepared for the construction of a concrete oil plant at Mariners Harbor, S. I. The estimated cost is $1,500,000. Frederick R. Kellogg is interested. Construction will be started about June 1.

Athenia, N. J.—Bids will be received about Feb. 1, by the Magor Car Co., for the construction of a one-story corrugated iron and steel addition. The estimated cost is $20,000. Barclay & Klapp, 60 Wall St., New York, N. Y., have prepared plans.

✚Newark, N. J.—The contract for the construction of a one-story factory on South 11th St., for the American Piston Ring Co., 378 Jelliff Ave., has been awarded to the ESSEX CONSTRUCTION CO., 87 Academy St. Estimated cost, $11,000.

Pittsburgh, Penn.—Plans are being prepared by Janssen & Abbott, Fifth Ave., for the construction of an eight-story, 40x110-ft. laundry and warehouse on Liberty Ave. for the Fort Pitt Hotel Co. Estimated cost $100,000. Noted Sept. 3.

✚Baltimore, Md.—(Correction)—The contract for the construction of a nine-story, 33x76-ft. factory for the Townsend Grace Co., has been awarded to MORROW BROS. Estimated cost, $80,000. Noted Sept. 17 and Jan. 7.

Charleston, S. C.—The General Asbestos & Rubber Co., plans to construct a $200,000, plant in North Charleston.

Louisville, Ky.—Bids will be received after Feb. 1, by Albert Kahn, Arch., Trussed Concrete Bldg., Detroit, Mich., for the construction of a six-story, reinforced-concrete assembling plant for the Ford Motor Co., Detroit, Mich. Noted Jan. 7.

Cleveland, Ohio—(Official)—Construction be started about April 1 on the 12-story, 196x495-ft., terminal warehouse at West Ninth St. for the Ninth St. Terminal Warehouse Co. The estimated cost is $2,000,000. Uoted Dec. 10.

✚Cleveland, Ohio—The contract for the construction of a one-story, 35x135-ft. addition on Perkins Ave. for the Metals Welding Co., 4400 Perkins Ave. has been awarded to PAUL BROS. CO., Citizens Bldg. Noted Jan. 7.

Steubenville, Ohio—Armour & Co., will construct an addition to its plant on Adams St. Estimated cost, $55,000.

✚Detroit, Mich.—The general contract for the construction of a two-story and basement, 35x187-ft. storage building on Glennan Ave., for the Independent Brewing Co., has been awarded to JOHN BEYSTER, JR., 560 Baker St. Estimated cost $10,000.

Detroit, Mich.—The Remy Electric Co. 1005 Woodward St. plans to construct a plant to cost about $1,000,000.

Manitowoc, Wis.—The Atlas Engineering Co., Milwaukee plans to construct a factory and machine shop, to cost about $25,000. Earl F. Miller, Dempsey Bldg., Milwaukee is Arch.

Milwaukee, Wis.—The National Supply Co., is having plans prepared for the construction of a two-story, 65x150-ft. warehouse, on Reed St.

Plymouth, Wis.—The C. F. Kade Fixture & Showcase Co. has increased its capital from $30,000 to $75,000 for the construction of a two-story, 60x180-ft. woodworking shop, two dry kilns and a storage house. Construction will be started in the spring.

✚West Allis, Wis.—Contracts for the construction of a factory and machine shop at 51st Ave. and Mitchell St. for the Davis Mfg. Co., 15th Ave. and Park St., have been awarded as follows: General contract, KLUG & SMITH, Mack Blk., Milwaukee; steel and iron, WORDEN-ALLEN CO., Milwaukee; carpentry, MADSEN CHRISTENSEN & INGBRETSON, Milwaukee. Estimated cost, $125,000. Noted under Milwaukee, Wis., May 14 and Jan. 14.

Des Moines, Iowa—Bids are being received by R. G. McDowell, Arch., Good Blk. for the construction of a three-story, 40x134-ft. warehouse on 16th St. and Grand Ave. for Elner Turner, 418 East 16th St. Estimated cost, $20,000.

Des Moines, Iowa—Plans are being prepared by Norman T. Vorse, Arch., 911 S. & L. Bldg., for the construction of a one-story addition to the Campbell Bread Co. Estimated cost, $25,000.

✚Waterloo, Iowa—The contract for the construction of a concrete factory for the United Glove Co., has been awarded to O. W. ARMAGOST, at $10,816. J. F. Manning, Waterloo is interested.

Duluth, Minn.—The Duluth Crushed Stone Co., plans the construction of a two-story addition. The estimated cost is $15,000.

✚Minneapolis, Minn.—The Pillsbury Flour Mills Co., has awarded the contract to H. N. LEIGHTON CO., 127 South Tenth St., for the construction of a two-story and basement 102x115-ft. machine shop at Third Ave. S. E. and Second St. Estimated cost, $40,000.

✚Joplin, Mo.—The contract for the construction of a one-and two-story, 100x120-ft. bakery on 18th and Main St., for the Junge Baking Co. has been awarded to LAIN & HOFFMAN. The estimated cost is $50,000.

✚**St. Louis, Mo.**—The contract for the construction of a three-story and basement, 78x100-ft. warehouse on Morgan and Tenth St., for C. J. & F. E. Briner, Elec. Engrs., 204-208 Franklin St., has been awarded to the M. EYSSELL CONSTRUCTION CO., 816 Olive St. Estimated cost, $25,000.

✚**St. Louis, Mo.**—The contract for the construction of the two-story, 80x152-ft. warehouse and stable at 12th and Spruce St., for the Columbia Transfer Co., has been awarded to CHARLES V. McCORMICK & SON. Estimated cost $80,000. Noted Oct. 22.

Brownsville, Tex.—The Brownsville Chamber of Commerce has received a proposition from H. S. Dew, Dewalt, for the incorporation of a company with a capital of $100,000. The company will construct a packing plant.

Galveston, Tex.—The Galveston Ice & Cold Storage Co., will construct a three-story, brick addition to its plant. Estimated cost, $50,000. G. H. Sapper is Mgr.

Seattle, Wash.—Bids will be received until Jan. 28 by the Commissioners of the Port of Seattle, Capitol Bldg., for the construction of the seven-story, reinforced concrete cold storage warehouse, at the East Waterway Turning Basin. The estimated cost is $150,000. J. R. West is Engr. Noted Oct. 15 and 29, Nov. 5 and Dec. 31.

Walla Walla, Wash.—The Brown-Lewis Corporation is preparing to construct a factory. The capital of the company is $100,000. Fred G. Lewis, J. T. Brown and A. B. Fox are Trustees.

Wenatchee, Wash.—Plans are being prepared by William Turner for the construction of a reinforced concrete warehouse and cold storage plant. The estimated cost is $400,000.

Berkeley, Calif.—George W. Rodehaver, 2411 Regal Rd., will construct a one-story, commercial garage to cost, $10,000. Woollett & Woollett, Newhall Bldg., San Francisco, are Archs.

Sacramento, Calif.—Plans have been prepared by E. C. Hemmings, Arch., for the construction of a four-story creamery and salesroom on K near 15th St. Estimated cost, $50,000.

San Bernardino, Calif.—The Consumers Ice & Cold Storage Co., has purchased a site, at D near Third St. for the construction of an ice and cold-storage plant. Estimated cost, $70,000.

San Francisco, Calif. — (Official) — Construction will be started about May 1 on the plant for the Western Sugar Refining Co., at Humboldt and Louisiana St. Plans have been prepared for two buildings, an 11-story and basement, 98x144 ft. structure and a one-story, 58x161-ft. machine shop. Estimated cost $300,000. W. E. Murray is Ch. Engr. Noted Dec. 31.

San Francisco, Calif.—L. J. Devlin, Arch., is preparing plans for the construction of a three-story and basement warehouse on Seventh St., for Dunham, Carrigan & Hayden. Estimated cost, $40,000.

FEDERAL GOVERNMENT WORK

Storehouse—Fort Williams, Maine—(Cape Cottage post office—The following bids were received for constructing the storehouse at Fort Williams; John J. Fitzpatrick & Son, Plattsburg, N. Y. (a) concrete, $5214; (b) brick, $4777; F. A. Rumery Co., Portland, Maine, (a) $4763; (b) $4563; John W. Burrowes Co., Portland, (a) $3580; (b) $4240; Forgionne & Romano, Portland, (a) $3422; (b) $3640; Sanders Contracting Co., Portland, (a) $4667; (b) $4667; F. W. Cunningham & Sons, Portland, (a) $3579; (b) $3914; Blackstone & Smith, Portland, (a) $3190; (b) $3514. Noted Dec. 17.

★**Dredging**—Boston, Mass.—Bids will be received until 10 a.m., Feb. 18, by Lieut. Col. W. E. Craighill, U. S. Engineer office, Boston, for dredging in Chelsea Creek, Boston.

Locomotive Crane—Boston, Mass.—The following are the bids received for furnishing one 15-ton locomotive crane to the Navy Yard, Boston: Link-Belt Co., Chicago, Ill., (a) $6315; (b) $6000; (c) $135. Orton & Steinbrenner Co., Chicago, (a) $6229; (b) $6119; (c) $4665. Ohio Locomotive Co., New York, N. Y. (a) $7500; (b) $5600; (c) $6800. Industrial Works, Bay City, Mich., (b) $6300; (c) $5350. McMyler Co., Bedford, Ohio, (b) $5996. Brown Hoisting Machinery Co., New York, (a) $6500; (c) $5200. Browning Engineering Co., Cleveland, Ohio, (b) $5980; (c) $5210. American Hoist & Derrick Co., St. Paul, Minn., (b) $5462; (c) $5162. Noted Dec. 24.

✚**Repairs to Post Office**—Providence, R. I.—The contract for making repairs to the post office at Providence, has been awarded to the HOPE BUILDING CO., Providence, at $5097. Noted Jan. 7.

★**Repairs to Breakwater**—Stonington, Conn.—The following are the bids received for repairing breakwater in Stonington Harbor: E. S. Belden & Sons, 217 Laurel St., Hartford, Conn., $4850; Coast & Lakes Contracting Corporation, 41 Broad St., New York, N. Y., $6700; T. A. Scott Co., Inc., New London, Conn., $5625; Olsen & Klavenes, 336 61st St., Brooklyn, N. Y., $6750; Estate of John Beattie, Leete Island, Conn., $5800; C. R. Simpson, 170 Broadway, New York, N. Y., $11,100. Noted Dec. 3.

Repairing Vessel—Baltimore, Md.—The following are the bids received by the Lighthouse Inspector for repairing Light Vessel No. 52. Old Dominion Marine Railway Corporation, Norfolk, Va., $4617. Skinner Shipbuilding & Dry Dock Co., Baltimore, Md., $5578. Spedden Shipbuilding Co., Baltimore, Md., $5598. Smith & McCoy, Norfolk, Va., $6478. Warwick Machine Co., Newport News, Va., $6915. W. S. Cahill Co., Baltimore, Md., $7029. Noted Dec. 12.

Skylights—Washington, D. C.—The following are the bids received for installing skylights on the Patent Office Bldg.: J. S. Thorn & Co., Philadelphia, Penn., $20,377; Wheeling Metal Mfg. Co., Wheeling, W. Va., $18,815; Classon Architectural Metal Co., Providence, R. I., $19,177; National Ventilating Co., New York, N. Y., $19,690; Superior Cornice & Skylight Mfg. Co., New York, $35,000; Rex-Lite Co., Inc., New York, N. Y., $16,850; H. L. Giclas, Washington, D. C., $18,970; Davis Construction Co., Washington, D. C., $23,411; W. A. Finglas, Baltimore, Md., $26,687; Arthur E. Rendale, New York, N. Y., $18,000; John Bird, Philadelphia, Penn., $18,696; National Skylight Ventilator Co., Rochester, N. Y., $19,760; H. H. Peterson Co., New York, N. Y., $25,797; Vaile & Young, Baltimore, Md., $17,321; J. D. Thompson Co., Washington, D. C., $22,994; W. M. Whyte, Washington, D. C., $23,844; David Lipton's Sons Co., Philadelphia, Penn., $24,793; L. A. Storch & Co., New York, N. Y., $20,400; Lewis Van Dorp, Topeka, Kan., $25,624. Noted Dec. 17.

★**Bridge Span**—Washington, D. C.—Bids will be received by Lieut. Col. H. C. Newcomer, Southern Bldg., Washington, D. C., until Feb. 17, for the substitution of through span for deck span in the Pennsylvania Ave. Bridge.

★**Reconstructing Wharves**—Washington, D. C.—Bids will be received at the office of the Secretary of the Board of Commissioners, Room 509, District Bldg., until 2 o'clock p.m., Feb. 11, for reconstructing wharves at municipal fish wharf and market, on Water St., S. W., between 11th and 12th St. Further information may be obtained from the Chief Clerk, Engineer Dept., Room 427, District Bldg., Washington, D. C.

Post Office—Kinston, N. C.—Bids were received as follows for the construction of a post office at Kinston, (a) limestone; (b) sandstone: J. S. Rogers Co., Moorestown, N. J., (a) $61,580; (b) $63,900. William H. Fissell & Co., 1133 Broadway, New York, N. Y., (a) $57,700; (b) $59,700. J. L. Crouse, Greensboro, N. C., (a) $54,887; (b) $56,900. Blalock Bros., Kinston, N. C., (a) $66,800. George A. Clayton, Gould Bldg., Atlanta, Ga., (a) $62,449. Barnes Bros., Logansport, Ind., (a) $65,000. W. J. Brent Construction Co., Norfolk, Va., (a) $65,825; (b) $67,325. Longest & Tessier Co., Greensboro, N. C., (a) $64,000; (b) $64,800. Lewis P. Fluhrer Co., 220 West 42nd St., New York, (a) $56,633. Colonial Construction & Supply Co., Charlottesville, Va., (a) $58,885. Westchester Engineering Co., White Plains, N. Y., (a) $51,900; (b) $56,000. Torbert Construction Co., Hampton, Va., (a) $56,349; (b) $60,349. George W. Stiles Construction Co., Rookery Bldg., Chicago, Ill., (a) $56,500. W. M. Sutherland Building & Construction Co., St. Louis, Mo., (a) $55,949. Noted Dec. 10.

✚**Post Office**—Canton, Miss.—The contract for constructing the post office at Canton has been awarded to ALGERNON BLAIR, Montgomery, Ala., at $39,475. Noted Nov. 12 and Dec. 31.

Post Office—Alliance, Ohio—Bids will be received by Oscar Wenderoth, Superv. Arch., Washington, D. C., until 3 p.m., Mar. 1, for constructing a post office at Alliance.

Post Office—Gary, Ind.—Bids were received for the construction of a post office at Gary, (a) limestone; (b) sandstone; (c) marble: Charles McCaul Co., Philadelphia, Penn., (a) $95,790; (b) $103,790; (c) $120,790; R. S. Moore, Lafayette, Ind., (a) $98,800; (b) $104,800; (c) $123,900; George W. Stiles Construction Co., Chicago, Ill., (a) $99,300; (b) $110,400; (c) $125,900; Conners Bros. Co., Lowell, Mass., (a) $99,750; (b) $108,755; (c) $122,755; George Baker Long, Worcester, Mass., (a) $99,850; (b) $109,150; (c) $123,650; J. L. Crouse, Greensboro, N. C., (a) $100,615; (b) $106,115; (c) $130,556; Westchester Engineering Co., White Plains, N. Y., (a) $101,313; (b) $112,000; (c) $125,400; John K. Unkefer & Co., Minerva, Ohio, (a) $101,752; (c) $126,852; J. H. Wiese, South Omaha, Neb., (a) $102,290; Charles W. Gindele Co., Chicago, Ill., (a) $102,500; (b) $111,000; James Devault & Co., Canton, Ohio, (a) $102,903; (b) $108,403; (c) $124,600; W. H. Fissell & Co., New York, (a) $103,000; (b) $114,362; (c) $125,000; Bedford Stone & Construction Co., Indianapolis, Ind., (a) $104,990; (b) $108,000; (c) $125,000; M. Yeager & Sons, Danville, Ill., (a) $16,363; (b) $114,363; (c) $126,363; Hiram Lloyd Building & Construction Co., St. Louis, Mo., (a) $107,848; (c) $129,998; Christ Kanzler & Son, Evansville, Ind., (a) $113,333; (b) $115,900; William Everly, Indianapolis, Ind., (a) $116,887; (b) $121,387; (c) $154,000; Dieter & Wenzel Construction Co., Wichita, Kan., (a) $116,905; (b) $124,000; (c) $146,900; Thomas W. Cissel, Wooster, Ohio, (a) $118,000; (b) $125,000; (c) $141,000; Ingauld Moe, Gary, Ind., (a) $119,674; Clarke Construction Co., Danville, Ill.; (a) $124,950; (b) $138,300; (c) $152,000.

✚**Post Office**—Ishpeming, Mich.—The contract for the construction of a post office at Ishpeming has been awarded to JAMES DEVAULT, Canton, Ohio, at $56,608. Noted Dec. 31.

Building—Fort Leavenworth, Kan.—The following are the bids received Jan. 1, by Capt. H. E. Comstock, Constructing Quartermaster: John Barnes, Leavenworth, Kan., $46,763; R. B. Yoakum, Leavenworth, $44,000; Kelley & Baehl, Leavenworth, $44,693; Aiken & Thayer, Kansas City, Mo., $46,591; Fogel Construction Co., Kansas City, $45,987; Kansas City Construction Co., Kansas City, $47,500; Jones Bros., Leavenworth, $48,872; Nicholas Miller, Kansas City, Mo., $54,680; John E. Anderson & Son, Kansas City, Mo., $50,631; J. W. Wright, Leavenworth, $48,980. Noted Dec. 24.

Fence—Sully's Hill National Park (Devil's Lake post office), N. D.—Bids will be received by Carl Vrooman, Acting Secy. of State, Washington, D. C., until 2 p.m., Feb. 2, for constructing an inclosure around Sully's Hill National Park.

Earthwork—Elsberry, Mo.—Bids will be received by the Mississippi River Commission, 1311 International Life Bldg., St. Louis, Mo., until 11 a.m., Feb. 8, for constructing about 100,000 cu.yd. of earthwork in the Elsberry drainage district.

Roof Work—Denver, Colo.—The following bids were received for roof work on the post office and court house; Lewis Van Drop, Topeka, Kan., $7040; Norman Ker Co., New York, N. Y., $13,161. Noted Jan. 7.

Buildings, Etc.—Fort Huachua, Ariz.—The following are the bids for constructing and remodeling various buildings, (a) with asbestos roof, (b) with wood shingles: Stanley Bevan, El Paso, Tex., (a) $247,534, (b) $241,948; Mayfield & Shaw, Fort Bliss, Tex., (a) $193,027, (b) $189,919; Los Angeles Planing Mill Co., Los Angeles, Calif., (a) $218,000, (b) $213,777; Thomas O'Neil, Denver, Colo., (a) $207,000, (b) $205,350; W. W. Atkinson, Los Angeles, Calif., (a) $207,245, (b) $203,665; J. T. Dalton & Son, Junction City, Kan., (a) $197,250, (b) $194,397; Arizona Engineering & Construction Co., Mesa, Ariz., (a) $197,900, (b) $196,000; J. M. Sparks, Douglas, Ariz., (a) $156,206, (b) $153,261; Edward O. Hamilton, Omaha, Neb., (a) $253,000, (b) $249,500; V. E. Ware, El Paso, Tex., (a) $221,807, (b) $219,840; Albrecht-Anderson Construction Co., Phoenix, Ariz., (a) $214,436, (b) $212,436; Ziegler Bros., Junction City, Kan., (a) $194,385, (b) $191,934; Phoenix-El Paso Building Co., El Paso, Tex., (a) $213,670, (b) $211,286; W. E. Kier Construction Co., San Diego, Calif., (a) $215,835, (b) $213,810; W.

O. Morrison, Denver, Colo., (a) $194,784, (b) $192,864; R. W. Roller, San Francisco, Calif., (a) $222,333, (b) $220,287; W. H. Jones, Phoenix, Ariz., (a) $240,800, (b) $235,200; Winget Construction Co., Los Angeles, Calif., (a) $193,429, (b) $188,235. Noted Nov. 26.

✚Bridge—Tuba, Ariz.—The contract for the construction of the substructure of the steel highway bridge over the Moencopi has been awarded to the PUEBLO BRIDGE CO., Pueblo, Colo., at $3061, and the contract for the superstructure to the JOLIET BRIDGE & IRON CO., Joliet, Ill., at $2680. Noted Dec. 3.

Buildings—Bremerton, Wash.—Bids were received as follows, Jan. 16, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of three one-story ward pavilion buildings, each 23x71 ft., each with two wings 9x15 ft. each, for the Navy Yard, Puget Sound, Wash.: Fleines & Dahl, $14,756; Carlson & Co., $13,348; L. Lent, Bremerton, Wash., $13,227; Harry H. Cotton, Port Angeles, Wash., $16,643; Hansen & Co., $15,900; Gutleben Bros., San Francisco, Calif., $14,980; Calling & Hoberg, $12,382; William Wills, $14,543; Zatley Matthese, $12,996; J. L. Murphy & Co., Tacoma, Wash., $13,824; N. T. Barnes, Kent, Wash., $12,772; Charles H. Scharr, $13,450; Eckman & Mowat, $12,725; Lowmark & Heydal, Tacoma, Wash., $12,657; Balch & Arnold, $12,859; M. A. Benbennich, Bremerton, Wash., $14,394; Bert Ward, $11,363; B. T. Erikson, $12,483. Bidders, not specified, are of Seattle.

✚Post Office—Medford, Ore.—The contract for the construction of a post office at Medford has been awarded to SOUND CONSTRUCTION & ENGINEERING CO., Seattle, Wash., at $96,123. Noted Aug. 13 and Sept. 3.

Post Office—Pendleton, Ore.—It is reported that plans have been completed for the proposed $122,000 post office, and bids will be called for soon.

MISCELLANEOUS

Fire Station—Hopedale, Mass.—Bids will be received at once for the construction of a fire station on Dutcher St. It will be two stories, 63x65 ft. Robert A. Cook, Milford, Mass., is Arch.

Stone Crushers, Engines and Cranes—Hartford, Conn.—(Official)—The Suffield-Berlin Trap Rock Co., 18 Asylum St., writes that it is about to place orders for stone crushers, engines, boilers, screens, locomotive cranes, pumps, drills and cars; these will be used at the plant which is being established at Suffield. All orders will be placed from the Hartford office. L. J. Coburn is Pres.

Riprap—New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received until noon, Jan. 26, by R. A. C. Smith, Comr., Docks, Battery Pl., for furnishing the labor and materials necessary for delivering and placing about 50,000 cu.yd. of riprap.

Dredging—New York, N. Y.—(Borough of Manhattan, Brooklyn, Queens, the Bronx and Richmond)—The following bids were received Jan. 18, by the Commissioner of Docks, for dredging (a) 250,000 cu.yd. in the North River; and (b) 80,000 cu.yd. in the East and Harlem Rivers: R. G. Packard Co., (a) 15.8c. per cu.yd., (b) 25.8c.; Henry Du Bois Sons Co., (a) 13.9c.; P. Sanford Ross Co., (a) 15.8c., (b) 28.4c.; Coastwise Dredging Co., (b) 22.45c.; William Beard, (a) 14.7c., (b) 18.7c.; Morris & Cummings, (a) 11.83c. Noted Jan. 14.

✚Filling—New York, N. Y.—(Borough of Manhattan)—(Official)—The department of Parks has awarded the contract for filling the swamp land at the southwestern section of Van Cortlandt Park to the VAN CORTLANDT CONTRACTING & IMPROVEMENT CO., INC., at $14,951. Noted Jan. 14.

Motor Fuel Wagons—New York, N. Y.—(Borough of Manhattan)—(Official)—Bids for furnishing the fire department with four motor driven fuel wagons were received on Jan. 15 from: International Motor Co., West End Ave., New York, at $13,784, and the Croce Automobile Co., Asbury Park, N. J., at $11,392. Noted Jan. 7.

Stable and Section House—New York, N. Y.—(Borough of Queens)—(Official)—Bids will be received by Maurice E. Connolly, Borough Pres., until 11 a.m., Jan. 29, for the construction of a stable and section house for the Bureau of Street Cleaning, at Flushing Ave., near Metropolitan Ave., Ridgewood. The amount of security required is $25,000.

Foundations and Seawall—Allenhurst, N. J.—Bids will be received until noon, Jan. 25, by Charles K. Savage, Borough Clk., for reinforced-concrete foundations for the Allenhurst Casino; also for a reinforced-concrete seawall.

Motor Fire Apparatus—Camden, N. J.—The Fire Committee of the City Council is planning to issue $100,000 in bonds for the motorization of the city fire department equipment.

Cement, Lime and Sand—Jersey City, N. J.—(Official)—Bids will be received until 2 p.m., Jan. 28, by the Board of Commissioners for furnishing portland cement, Westchester Lime, North River hard-burned brick and sand; from date of contract to Nov. 30, 1915.

Breakwater—Long Branch, N. J.—Surveys are being made for a breakwater at Long Branch, to cost about $400,000.

Market—Newark, N. J.—(Official)—Bids will be received until 2 p.m., Jan. 29, by the Committee on Public Buildings, Common Council, for the construction of the proposed Center St. market. Estimated cost, $700,000.

✚Dredging—Passaic, N. J.—The contract for dredging in the Passaic River has been awarded to J. A. SEELEY, New York, at $30,000.

Elimination of Grade Crossings—Paterson, N. J.—The Public Utilities Commission, Trenton, N. J., has sustained the application of the city for the abolition of 15 grade crossings on the line of the Erie R.R. Co. through the city. The estimated cost is $2,587,000.

Breakwater—Baltimore, Md.—Plans and specifications have been submitted to the city, by Oscar F. Lackay, Harbor Engr., for the construction of a breakwater to protect the boat and swimming basin at Fort McHenry Park. The estimated cost is $35,000. Noted Nov. 26, Dec. 10 and 31.

✚Wharf—Baltimore, Md.—The Prudential Oil Corporation, 17 Battery Pl., New York, has awarded a contract to ANDREW MILLER & CO., Baltimore, for the construction of a 400x800 timber and reinforced-concrete bulkhead wharf.

Pier—Port Covington, Md.—(Baltimore post office)—Plans and specifications are being prepared by the Engineering Department, Western Maryland R.R. Co., Hillen Station, Baltimore, for the construction of a reinforced-concrete pier, about 200 ft. long, on reinforced-concrete piles. The estimated cost is $500,000.

House Numbers—Charlotte, N. C.—(Official)—Bids will be received until 3 p.m., Jan. 26, by the City Engineer, for furnishing f.o.b. cars at Charlotte, 10,000, porcelain on metal, house numbers. Specifications may be obtained from Samuel H. Lea, City Engr.

Pier—St. Petersburg, Fla.—Press reports state that the city plans to build a freight pier in Bayboro Basin. M. W. Spencer is City Engr.

Motor Boat Canals—Winter Haven, Fla.—The Twenty Lakes Boat Course Club has engaged Lawrence Manning, Atlantic Engineering Co., Savannah, Ga., to survey and prepare plans for the construction of a motor boat course. Three miles of 20-ft. canal, four ft. deep, will be necessary for the connection of a chain of lakes. The completed course will be about 100 miles in length.

Wharf—Decatur, Ala.—The City Council has authorized the purchase of land on the Tennesee River as a site for a wharf. James A. Nelson is Mayor.

Docks, Dredging and Warehouses—Mobile, Ala.—Press reports announce that the Turner Terminal Co., recently incorporated, has taken over the property of the Turner-Hartwell Docks Co. Bonds for $1,500,000 will be issued for the acquisition of additional property, the construction of warehouses, dredging the slips, building docks and maintenance of switching yard. Horace Turner is Pres.

Drainage—Crowley, La.—Acadia Parish Fifth Ward Drainage District No. 1 will vote, Feb. 2, on a bond issue of $50,000 for the construction of a gravity drainage system. Ellis Hoffpauir is Pres. Comrs.

Grandstand—New Orleans, La.—Press reports state that the New Orleans Baseball Club plans to erect steel grandstands and bleachers at the White City grounds, Carrolton and Tulane Ave.

Dredging—Ashland, Ohio—The Commissioners of Ashland and Wayne counties contemplate widening and deepening Muddy Fork and Jerome Fork, branches of the Mohican River. The estimated cost is $60,000.

Traveling Cranes—Cleveland, Ohio—Bids will be received until Jan. 28, by the Commissioner of Purchases and Supplies, Room 511, City Hall, for furnishing two traveling cranes for the Department of Public Utilities, Division of Water. Specifications may be obtained from Charles F. Schults, Comr., Water Dept., 113 Superior Ave.

Drainage District—Kenton, Ohio—(Official)—A petition has been filed with the Hardin County Court of Common Pleas, for the creation of a drainage district, to be known as the Upper Scioto River Conservancy District. This district will include about 200,000 acres of land in Hardin County; and will be formed under the provisions of the Ohio Conservancy Act. Willis E. Meyers, Kenton, is Ch. Engr.

✚Stadium—Evansville, Ind.—The City School Board has awarded the contract for the construction of stadium at Garvin Park athletic field to the M. J. HOFFMAN CONSTRUCTION CO., Evansville, at $39,955. Noted Oct. 29, Jan. 7.

Drain—Newcastle, Ind.—(Official)—Bids will be received until Feb. 6, by Charles E. Byrket, Drainage Comr., Henry Sounty, for the construction of Drain No. 3202, of Fall Creek Drain. About 500,000 cu.yd. of excavation will be necessary. Plans and specifications may be obtained from the Clerk of the Henry Circuit Court, Newcastle.

Sewers—Milwaukee, Wis.—(Official)—Bids will soon be received for constructing about five miles of brick and concrete sewers. This is the first construction work to be undertaken by the Sewerage Commission for the collecting of sewage in the city. The whole work will embrace about 35 miles of intercepting sewers and with a disposal plant, will cost approximately $10,000,000. T. Chalkley Hatton, City Hall, is Ch. Engr. of Sewerage Comn.

Ditch—Stillwater, Minn.—(Official)—Bids will be received until Jan. 29, by N. A. Nelson, County Audr., for the construction of Judicial Ditch No. 4, for which bids were recently rejected. The work will include excavation and tiling. The estimated cost is $14,747.

Motor Fire Apparatus—Phœnix, Ariz.—Bids soon will be advertised for a Graham high-pressure motor fire pump to cost about $9000 and an aërial truck to cost $12,000.

Filling—Seattle, Wash.—The City Council has instructed A. H. Dimock, City Engr., to prepare plans for filling Alki Ave. from West Seattle Ferry Landing to Alki Point. The estimated cost is $210,000.

✚Dock—Seattle, Wash.—The Grand Trunk Pacific Steamship Co., has awarded the contract for the construction of the superstructure of its dock at the foot of Marion St. to J. M. CLAPP, Burke Bldg., Seattle, at $75,000. Webster & Ford, Archs., Lyon Bldg., prepared the plans.

✚Dredge—Seattle, Wash.—The American Tin Can Co., Portland, Ore., has awarded the contract to the AMERICAN DREDGE & CONSTRUCTION CO., Seattle, at $50,000, for the construction of a dredge for use in the Alaska tin fields.

Drainage—Snohomish, Wash.—The County Commissioners, Snohomish County, have had plans prepared for the construction of a drainage system and the installation of reinforced concrete floodgates between Snohomish and Monroe. The estimated cost is $50,000.

Jetty Work—Florence, Ore.—Press reports state that the Siuslaw Port Commission has authorized the sale of $100,000 in bonds issued last year. This amount will be used to build jetties south of the Siuslaw River.

✚Drainage—Modesto, Calif.—The contract for the construction of the Curtis and Sproul canals has been awarded to E. K. FINNEY at $12,464.

Elimination of Grade Crossing—Roseville, Calif.—An undergrade crossing beneath the tracks of the Southern Pacific Co., near Roseville, will be constructed soon at an estimated cost of $11,000, the cost to be divided between the State Highway Commission and the railroad company.

Steel Furniture and Fixtures—Stockton, Calif.—Bids will be received until Jan. 28, by the Board of Supervisors, San Joaquin County, for furnishing steel furniture and fixtures for the auditor's office. E. D. Graham, Stockton, Calif. is Clk. of the Bd.

Grand Stand—London, Ont.—Plans will be prepared soon and bids received for the construction of a steel and reinforced concrete grand stand at the Western Fair Grounds. A. M. Hunt is Mgr., Western Fair Bd.

BUILDINGS

Other items relative to Building Construction will be found under the following headings: "Industrial Works;" "Federal Government Work" and "Miscellaneous"

Boston, Mass.—P. G. Rice & Co., Old South Bldg., plans to construct a four-story brick apartment house on Commonwealth Ave., Brighton. Estimated cost $50,000.

✚Boston, Mass.—The contract for the construction of a six-story, 60x150-ft. building on School St., for J. Murray Howe, 78 Devonshire St., has been awarded to the NATIONAL FIREPROOFING CO., 200 Devonshire St. C. Howard Walker, 71 Kilby St., is Arch. Noted Jan. 14.

Fall River, Mass.—Bids will soon be received for the construction of a four-story, 71x180-ft. police station. Estimated cost, $185,000. E. M. Corbett, 70 Bedford St., is Arch. Noted Dec. 3.

Springfield, Mass.—Plans have been prepared by Shattuck & Hussey, Chicago, Ill., for the construction of a seven-story, 100x130-ft. building on Chestnut, near Bridge St., for the Y. M. C. A. Estimated cost $93,000. H. A. Moseley is Chn., Bldg. Com.

Worcester, Mass.—(Official)—Plans have been prepared by John T. Simpson, Arch., 1224 Essex Bldg., Newark, N. J., have been accepted by Mayor George M. Wright, and approved by the School Committee, for a $200,000 fireproof addition to the North High School, Salisbury and Lancaster St. Noted Oct. 29.

✚Providence, R. I.—The contract for the construction of a $200,000 building for the Rhode Island School of Design has been awarded to NORCROSS BROS. CO., Worcester, Mass.

Bristol, Conn.—Plans are being prepared by W. P. Crabtree, Arch., New Britain, for the construction of a school. Estimated cost, $85,000. C. T. Treadway, Chn., Bldg. Com.

Buffalo, N. Y.—Bids are being received by Francis G. Ward, Comr., Pub. Wks., for the construction of a two-story and basement, 40x100-ft. police station on South Division St., and a two-story and basement, 40x110-ft. police station on Fillmore Ave. Estimated cost, $80,000. Howard L. Beck is City Arch.

New York, N. Y.—(Borough of Bronx)—Plans are being prepared by J. M. Felson for the construction of two five-story apartment houses on 226th St. and White Plains Ave., for A. M. Subo. Estimated cost, $80,000.

New York, N. Y.—(Borough of Brooklyn)—Plans have been prepared by Shampan & Shampan for two six-story apartment houses on Division and Bedford Ave., for the Ross Land Co. Estimated cost, $125,000.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received until 3 p.m., Jan. 25, by C. B. J. Snyder, Supt., School Bldgs., Park Ave. and 59th St., New York, for the construction of the new Public School, No. 100, on West First and Sheepshead Bay Rd.

New York, N. Y.—(Borough of Brooklyn)—Samuel Sass, 32 Union Sq., New York, is preparing plans for the construction of two six-story apartment houses on South Second and Hughes St., for the South Fifth Ave., Construction Co., 686 Willoughby Ave. Estimated cost, $80,000.

New York, N. Y.—(Borough of Manhattan)—Rouse & Goldstone, 38 West 39th St., are preparing plans for the construction of a 12-story apartment house at 159 East 79th St. for the 161st East 79th St. Co., Inc., 30 East 42nd St. Estimated cost, $250,000.

New York, N. Y.—(Borough of Manhattan)—Plans are being prepared by Louis E. Jallade, 37 Liberty St., for the construction of a four-story, 134x186-ft. Y. M. C. A. building at Washington Ave. and 161st St. Estimated cost, $225,000.

New York, N. Y.—(Borough of Manhattan)—Bids will soon be received by the Aldus Construction Co., for the construc-house at 13 West 55th St., for the George Backer Construction Co., 56 West 45th St. Estimated cost $200,000. Wallis & Goodwillie are Archs.

New York, N. Y.—(Borough of Manhattan)—Bids will soon be received by The Aldus Construction Co., for the construction of a five-story apartment house on Vermilyea Ave., between Isham and 211th St. Estimated cost, $90,000. Noted Dec. 24.

New York, N. Y.—(Borough of Manhattan)—Bids will be received by the Williams Building Co., 132 Nassau St., for the construction of a six-story apartment house at 113th St. and Seventh Ave. Estimated cost, $60,000. Gronenberg & Leuchtag are Archs. Noted Jan. 7.

New York, N. Y.—(Borough of Manhattan)—Plans are being prepared by Schwartz & Gross, 347 Fifth Ave., for the construction of a nine-story apartment house, at 122 East 76th St., for Julius Tishman & Sons, 18 East 41st St. Estimated cost, $200,000.

New York, N. Y.—(Borough of Manhattan)—Plans have been prepared by Neville & Bagge, Archs., for the construction of a six-story, 100x120-ft. apartment house on St. Nicholas Ave. and 190th St., for Stephen T. Egan. Estimated cost, $125,000.

Rochester, N. Y.—The Board of Education contemplates the construction of a $200,000 building to replace the Normal Training School No. 14, recently destroyed by fire.

Rochester, N. Y.—Bids will be received by J. H. Oberlies, Arch., Granite Bldg., for the construction of a three-story and basement high school on Lake Ave., for the Nazareth Academy. Estimated cost, $150,000. Noted Oct. 15.

Walden, N. Y.—Plans have been prepared by F. E. Estabrook, Arch., Newburgh, N. Y., for the construction of an 86x90x110-ft. town hall for the city of Walden. Estimated cost, $50,000.

East Orange, N. J.—Plans have been prepared by Edward V. Warren for the construction of a six-story, 70x75-ft. apartment house for the Arthur D. Crane Co., Park Ave. and Washington St. Estimated cost, $60,000.

✚Newark, N. J.—(Official)—The general contract for the construction of the McKinley School, Eighth Ave. and Factory St., has been awarded to E. M. WALDRON & CO. The UNDERPINNING & FOUNDATION CO., 290 Broadway, New York, N. Y., has been awarded the contract for constructing the foundation. E. F. Guilbert is Arch. for the Bd. of Education.

Lancaster, Penn.—Plans are being prepared by Shank & Estep, Archs., for the construction of a four-story, 90x137-ft. building for the Y. W. C. A. Estimated cost, $75,000.

Philadelphia, Penn.—Plans have been prepared by Horace Trumbauer, for the construction of an 11-story, 50x100-ft. building for the Sydenham Apartment House Co. Estimated cost, $100,000.

✚Philadelphia, Penn.—(Official)—The contract for the construction of a school on James and Pratt St., Tacony, has been awarded to THOMAS REILLY, 1616 Thompson St., at $126,525. Noted Jan. 7.

✚Philadelphia, Penn.—(Official)—The contract for the construction of an addition to the Southwark School has been awarded to WILLIAM R. DOUGHERTY, 1608 Sansom St., at $69,000.

Pittsburgh, Penn.—Plans are being prepared by the F. S. Schmeltz Co., for the construction of a three-story, 100x120-ft. apartment house in Shadyside, to cost $75,000.

Scranton, Penn.—Bids will be received until Feb. 1, by Albert J. Ward, Arch., Republican Bldg., for the construction of a three-story building for the Y. M. C. A. Estimated cost, $50,000.

Williamsport, Penn.—Plans are being prepared for the construction of a group of buildings for the Industrial Home for Women. Estimated cost, $250,000. Horace Trumbauer, Philadelphia, is Arch.

Wilmington, Del.—Plans have been prepared by A. Edward Rhodes, Arch., 9 Masonic Temple, for the construction of a three-story, 88x182-ft. school. Estimated cost, $140,000.

Lynchburg, Va.—Plans are being prepared by Alfred C. Bossam, 366 Fifth Ave., New York, for the construction of a one-story, 42x132-ft. fireproof building for the Lynchburg National Bank. Estimated cost, $115,000.

Richmond, Va.—The lowest bid received for the construction of a two-story, 60x140-ft. building at Smith and Marshall St., for the Board of Police Commissioners, was submitted by J. T. Nuckols, at $52,200. Carneal & Johnson, Chamber of Commerce Bldg., are Archs. Noted Dec. 24.

Huntington, W. Va.—Bids will be received until Feb. 5, by James K. Oney, Secy., Bd. of Education, for the construction of a three-story, 245x140-ft. high school. Estimated cost, $300,000. Vervus T. Ritter, Carnegie Library Bldg., is Arch. Noted Nov. 5.

Columbus, S. C.—Bids will be received about Feb. 1, by Clemson College, for the construction of a two-story and basement Y. M. C. A. building. Estimated cost, $75,000.

✚Savannah, Ga.—The contract for the construction of the nine-story Hicks Hotel on Congress St., has been awarded to the WISE GRANITE & CONSTRUCTION CO., Richmond, Va., at $105,000. Noted Dec. 17.

Birmingham, Ala.—Plans are being prepared by Harry B. Wheelock, Arch., for the construction of a five-story, 50x140-ft. building for the Steele-Smith Co. Estimated cost, $75,000.

Camden, Tenn.—Preliminary arrangements are being made for the construction of a $40,000 courthouse. G. B. Bain, J. S. Wright, W. A. Sashlee, W. D. Cooper, R. S. Stockyard, are members of the Bldg. Comn.

Nonconnah, Tenn.—(Memphis post office)—S. Geismer & Son, 231 McLemore Ave., Memphis, are preparing plans for the construction of a building for the Illinois R.R. shopmen. Estimated cost, $50,000.

Louisville, Ky.—Preliminary plans are being prepared by L. Keller & Son, for the construction of an apartment house at 1909 South Third St., to cost $50,000.

Akron, Ohio—M. C. Winter, Akron plans the construction of a $70,000 theater on Main St.

Canton, Ohio—George F. Hammond, Arch., 4220 Prospect St., Cleveland is preparing plans for the construction of a $400,000 Central High School.

Cincinnati, Ohio—The Cincinnati Y. M. C. A .has purchased a site at Elm St. and the Canal for the construction of a seven to ten-story building. Estimated cost, $500,000.

Cincinnati, Ohio—Plans previously prepared by Harry Hake, Arch., Provident Bank Bldg., have been revised for the construction of the Convention Hall. The estimated cost is $660,000. Noted Oct. 29.

Cleveland, Ohio—Plans are being prepared by Richard Irvin, Arch. and Engr., Union Bank Bldg., Pittsburgh, Penn., for the construction of the eight-story fireproof, reinforced concrete Daylight Bldg., at Lakeside Ave. N. E. and East Third St. for Harry J. Shlosser, Erie, Penn. Estimated cost, $100,000.

Dayton, Ohio—George R. Young and William H. Young have purchased property for the construction of an 11-story theater and office building.

East Cleveland, Ohio—Meade & Hamilton, Archs., are preparing plans for the construction of a one-story Carnegie library on Euclid Ave. Estimated cost, $55,000.

Lakewood, Ohio—Bids will be received until 1 p.m., Feb. 9, by P. T. Harrold, Clk., Bd. of Education for the construction of a library at Detroit and Arthur Ave. Edward L. Tilton, 32 Broadway, New York, N. Y. and Charles W. Hopkinson, 900 Rose Bldg., Cleveland are Archs. Noted Oct. 29.

Lakewood, Ohio—Bids will be received until noon, Feb. 9, by P. T. Harrold, Clk., Bd. of Education for the construction of the McKinley School, West Clifton Blvd. Charles W. Hopkinson, 900 Rose Bldg., Cleveland, is Arch. Noted Nov. 19.

✚Portsmouth, Ohio—The contract for the construction of the Garfield School has been awarded to JAMES I. BARNES, Logansport, Ind., at $45,777. Noted Dec. 10.

Ridgeville Corners, Ohio—Bids will be received about Mar. 1 for the construction of a $40,000 church. J. M. Miller, East Cleveland is Arch.

Springfield, Ohio—Plans have been prepared for the construction of a four-story and basement dormitory for boys, at the Ohio Masonic Home. The estimated cost is $60,000.

Toledo, Ohio—The Board of Education has authorized the issuance of $900,000 in bonds for the purchasing of school sites and for the construction of buildings. Noted Oct. 8.

Willoughby, Ohio—Bids will be received until Jan. 26, by the Board of Education for the construction of a three-story and basement high school. Estimated cost, $80,000. F. C. Warner, Hippodrome Bldg., Cleveland, is Arch. Noted Oct. 8.

✚Bloomington, Ind.—The contract for the construction of a city hall has been awarded to GEORGE A. WEAVER, Indianapolis, at $38,000.

Evansville, Ind.—The District Union Catholic Societies contemplate the construction of a $100,000 home in Evansville.

Greencastle, Ind.—Bids will soon be received by G. L. Grose, Pres. of De Pauw University, for the construction of a $100,000 gymnasium. Noted Oct. 8 and Dec. 3.

Warsaw, Ind.—The City School Board contemplates the construction of a grade school to cost about $60,000.

✚Detroit, Mich.—The contract for the excavation and foundation of a $1,000,000 library at Woodward, Cass, Putnam and Kirby Ave. has been awarded to IRWIN & LEIGHTON, 1338 Dime Bank Bldg., at $61,600. J. B. Kennedy is Secy. of Library Bd. Noted Dec. 17.

Bids will be received about Jan. 25, by the Library Commission for the construction of the superstructure.

Chicago, Ill.—Thomas Tagney, 434 Diversey Parkway, has purchased a site at Surf St. and Cambridge Ave. for the construction of an apartment house. The estimated cost is $175,000.

Eldena, Ill.—Morrison H. Vail, Arch., Galena St., Dixon is preparing plans for the construction of a two-story and basement County Infirmary. Estimated cost, $45,000. Contracts will be awarded about May 1.

Oshkosh, Wis.—Bids will be received about Mar. 1, for the construction of a three-story and basement high school. Estimated cost $100,000. Van Ryn & De Gelleke, 725 Caswell Bldg., Milwaukee, are Archs. Noted Oct. 22 and Dec. 31.

Superior, Wis.—The Bell Telephone Co., of Superior plans to construct a telephone exchange at John Ave. near 14th St. The estimated cost is $100,000. W. F. Hallfrisch is Local Mgr.

St. Paul, Minn.—R. N. Crawford has proposed to the Local Committee of the Association of Commerce, to construct a $500,000 home for working girls on Minnesota St., between 11th and 12th St.

Emporia, Kan.—Plans have been prepared by Shattuck & Hussey, Archs., 19 South La Salle St., Chicago, Ill., for the construction of a Y. M. C. A. building. Estimated cost, $75,000. L. V. Starky is in charge of work.

Sioux Falls, S. D.—Bids will soon be received by W. B. Fuller, Clk. of Bd. of Education for the construction of a school at East Eighth St., Austin, Mable and Blauvelt Ave. Noted Sept. 17.

Springfield, Mo.—The Board of Managers of the Missouri Pythian Home has had plans prepared for the construction of a dormitory addition. Estimated cost, $40,000. Bert E. Woolsey is Secy.

Dallas, Tex.—Louis Lipsitz, Dallas and A. Harris, plan to construct a six-story and basement building on Elm near Harwood St. Estimated cost, $150,000.

El Paso, Tex.—The lowest bid received for the construction of the $500,000 high school was submitted by the Alta Planing Mill Co., Los Angeles, Calif., at $340,000. Noted Sept. 17 and Dec. 10.

Greeley, Colo.—Plans are being prepared by W. N. Bowman, Arch., 915 Central Savings Bank Bldg., Denver, for the construction of a three-story courthouse. The estimated cost is $225,000.

✚Spokane, Wash.—(Official)—The contract for the construction of the county tuberculosis sanatorium at Edgecliffe has been awarded to J. E. CUNNINGHAM, 328 Augusta Ave., Spokane, at $45,187. Noted Dec. 31 and Jan. 14.

El Centro, Calif.—The Trustees of the Union High School District plan to vote for $125,000 in bonds for enlarging the high school.

Fresno, Calif.—Bids will be received until 8 p.m., Feb. 5, by C. C. Starr, Secy., Bd. of Education for the construction of the Washington School, at Fresno. W. D. Coates, Jr., Rowell Bldg. is Advisory Arch. Noted Sept. 10.

Palo Alto, Calif.—Allison & Allison, Archs., 1405 Bibernian Bldg., Los Angeles are preparing plans for the construction of a group of polytechnic high school buildings. Estimated cost $150,000.

✚Richmond, Calif.—The contract for the construction of an annex to the Richmond School has been awarded to JAMES S. WINTERS, at $49,097.

Sacramento, Calif.—C. C. Cuff, Arch. has prepared plans for the construction of a seven-story business block on K St. Estimated cost is $150,000.

Sacramento, Calif.—Plans have been prepared by E. C. Hemmings, Arch., for the construction of an eight-story office building to cost about $150,000.

Sacramento, Calif.—Preliminary plans have been prepared by E. C. Hemmings, Arch., for the construction of a store and office building on J St. Estimated cost, $100,000.

San Francisco, Calif.—Plans have been prepared by G. Albert Lansburgh, 709 Mission St., for the construction of a three-story addition at Port St. and Van Ness Ave. for the Concordia Club. Estimated cost, $65,000. Noted Sept. 3.

Toronto, Ont.—J. W. Leonard, Asst. to Pres. of Canadian Pacific Ry., Montreal, Que., has been named as executive head of the Terminal Co., which plans to construct a union station for Toronto. The estimated cost is $18,000,000.

The Titanium Alloy Mfg. Co., Niagara Falls, N. Y., announces that a bronze department has been organized and a general line of bronze castings will be produced. The department will be under the direct supervision of W. M. Corse.

CONTRACT PRICE

✚Sewer—Boston, Mass.—Bids were received by Louis K. Rourke, Comr. Pub. Ser., for constructing the Dent St. brook sewer from (A) MERRIMAC CONSTRUCTION CO. (awarded contract); (B) West Roxbury Trap Rock Co.; (C) P. Bompiani; (D) J. J. Conway; (E) H. F. Spinach Contracting Co.; (F) FcCarthy & Walsh; (G) M. DeSisto; (H) M. Meehan; (I) A. Barufaldi; (J) J. Landis; (K) C. Latterela; (L) M. DeMateo; (M) A. Cefalo; (N) W. J. Barry; (O) P. W. Hill; (P) J. Driscoll & Son Co. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
750 lin.ft. 8-in. pipe sewer	$1.10	$0.80	$1.25	$0.90	$1.50	$1.40	$1.00	$1.00	$1.70	$2.50	$1.20	$1.75	$1.70	$1.80	$3.50	$1.80
80 lin.ft. 30-in. pipe surface drain	1.25	0.86	0.95	0.80	1.50	1.25	1.25	1.25	1.20	1.67	2.00	1.00	1.50	1.50	1.75	1.80
30 lin.ft. 15-in. pipe surface drain	0.60	0.50	0.92	0.60	1.05	1.00	0.50	0.85	0.90	1.49	1.00	0.90	1.00	0.80	1.75	1.25
370 lin.ft. 12-in. pipe surface drain	0.60	0.50	0.49	0.60	0.98	0.75	0.65	0.70	0.90	1.43	0.70	0.85	1.00	0.80	1.75	1.00
170 lin.ft. 10-in. pipe surface drain	0.50	0.50	0.49	0.50	0.90	0.75	0.65	0.70	0.90	1.39	0.70	0.65	1.00	0.80	1.7.	1.00
820 lin.ft. 4 ft. 6 in. circular concrete surface drain	3.40	1.80	2.25	3.50	3.75	6.50	6.00	2.90	4.50	4.07	3.40	3.95	6.00	6.70	5.00	3.75
1093 lin.ft. 4 ft. 3-in. circularconcrete	3.00	1.80	2.25	3.00	3.50	5.00	3.50	2.65	3.25	3.80	3.00	3.95	6.00	6.40	5.00	3.35
201 lin.ft. 3 ft. 6-in. circular concrete surface drain	2.35	1.50	1.82	2.00	3.25	4.45	2.75	2.40	2.30	3.06	2.70	2.80	5.00	5.30	4.25	2.50
430 lin.ft. 2 ft. 3-in. circular concrete surface drain	1.00	0.90	1.10	1.50	2.50	3.55	1.85	1.65	2.00	2.09	2.60	1.65	3.50	4.50	2.75	1.90
500 cu.yd. rock excavation		5.00	4.00	5.00	0.50		1.00	2.50	2.00	1.90	5.00	1.60	5.00		0.01	4.00
in.ft. spruce piles not exceeding 10 ft. in length		0.40	0.55	0.20	0.40		0.15	0.25	0.10	0.24	0.25	0.10			0.15	0.35
100 M. ft. b.m. spruce lumber for sheeting	5.00	15.00	25.50				22.00	30.00	25.00	24.25	25.00	28.00			13.00	40.00
5 M ft. b.m. 2-in. planed and matched sheeting	50.00	30.00	25.50	60.00	40.00	35.00	65.00	35.00	30.00	30.00	50.00	0.01	80.00	40.00	35.00	30.00
20 M ft. b.m. spruce lumber for platforms	45.00	30.00	29.00	50.00	40.00		30.00	38.00	30.00	24.25	40.00	0.01			35.00	35.00
3300 lin.ft. pipe under drain	0.10	0.10	0.20		0.15	0.15	0.25	0.20	0.10	0.16	0.20	0.35			0.20	0.20
1750 cu.yd., Class A concrete	7.00	6.50	5.95	8.00	7.50	7.00	7.00	7.20	8.00	6.86	7.75	8.45	7.00	7.50	6.50	8.00
220 lin.ft. pipe C-B drain	0.50	0.50	0.57	0.50	0.50	0.75	0.60	1.00	0.50	0.65	0.50	0.35	0.50	0.50	0.70	0.50
20-in. lin.ft. 6-in. pipe for chimney	0.15	0.10	0.25	0.50	0.50		0.05	0.20	0.20	0.15	0.25	0.10		1.00	0.15	0.20
20 lin.ft. 6-in. pipe house drain	0.75	0.50	0.20		0.50		0.25	1.00	0.20	0.80	0.50	0.20		1.00	0.70	0.25
140 lin.ft. old drain reeMnnected		0.50	0.50	1.00	0.50	1.00	0.25	1.00	0.50	0.65	0.50		1.00	0.50	0.70	0.50
200 slants placed	0.05	0.10	0.20	0.10	0.25	0.10	0.25	0.30	0.10	0.16	0.50	0.10	0.10	0.50	0.50	0.25
12 lin.ft. 12-in. c.i. pipe in old sewer	0.50	1.00	1.00	1.00	1.00	0.50	0.50	0.75	0.50	5.00	1.00	1.00	0.50	2.00	1.00	1.00
3 manholes on sewer	35.00	30.00	35.00	40.00	45.00	35.00	35.00	40.00	40.00	0.48	50.00	40.00	40.00	50.00	40.00	40.00
18 manholes on surface drain	25.00	25.00	35.00	30.00	48.00	35.00	35.00	40.00	35.00	38.00	35.00	25.00	40.00	35.00	35.00	40.00
10 catch basins	45.00	40.00	35.00	50.00	50.00	55.00	55.00	30.00	50.00	56.00	50.00	47.00	50.00	60.00	55.00	50.00
1 manhole invert rebuilt	2.00	20.00	25.00		5.00	5.00	5.00	100.00	3.00	29.00	5.00	10.00	5.00	10.00	10.00	10.00
2 cu.yd. brick masonry		10.00	20.00		13.50		0.01	18.00	1.00	12.00	15.00	0.01			10.00	10.00
1 catch basin trap reset	2.00	5.00	10.00		3.00		3.00	20.00	3.00	3.00	5.00	5.00	5.00	5.00	5.00	10.00
1 connection between new and old conduits	2.00	5.00	25.00		5.00	10.00	5.00	100.00	5.00	10.00	5.00	1000.00		20.00	15.00	10.00
2 pipe cradles	2.00	2.00	5.00		5.00	5.00	5.00	75.00	5.00	5.00	10.00	8.00		10.00	5.00	10.00
Extended totals	$25,466	$25,758	$28,008	$29,272	$30,507	$30,779	$31,527	$30,946	$32,157	$32,237	$33,495	$33,758	$33,894	$34,170	$34,171	$35,029

CATALOG NOTICES

Chicago Pneumatic Tool Co., Fisher Building, Chicago, Ill. Bulletin No. 34-K. Fuel oil and gas driven compressors. Illustrated, 24 pp., 6x9 in.

The Bullock Tractor Co., 1801-1825 Diversey Parkway, Chicago, Ill. Catalog. "Creeping Grip" tractors. Illustrated, 32 pp., 6x9 in.

Archbold-Brady Co., Syracuse, N. Y. Catalog. Steel transmission structures and catenary bridges. Illustrated, 32 pp., 6x9 in.

Pawling & Harnischfeger Co., Milwaukee, Wis. Booklet. "Thirty Years of Progress." Illustrated, 52 pp., 8x10 in.

The Phosphor-Bronze Smelting Co., 2200 Washington Ave., Philadelphia, Penn. Price List No. 27. Illustrated, 32 pp., 3½x6 in.

Harrison Safety Boiler Works, Philadelphia, Penn. Catalog No. 601. Cochrane Multiport Valves. Illustrated, 72 pp., 6x9 in.

Sandusky Portland Cement Co., Sandusky, O. Spanish catalog. Portland cement. Illustrated, 32 pp., 7x9 in.

Sangamo Electric Co., Springfield, Ill. Bulletin No. 40. Single-phase and polyphase A. C. watthour meters. Illustrated, 32 pp., 8x10½ in.

Hydraulic Ramming Concrete Stone Machinery, Paterson, N. J. Catalog. Hydraulic ramming machinery for the manufacture of reconstructed stone. Illustrated, 32 pp., 6x9 in.

Lagonda Mfg. Co., Springfield, O. Catalog L-8. Boiler tube cleaners. Illustrated, 32 pp., 7½x10 in.

The Asbestos Protected Metal Co. announces that on Feb. 1, 1915, the general offices of company, including the executive, accounting, sales and engineering staffs, will be moved from Beaver Falls to the First National Bank Bldg., Pittsburgh. The manufacturing operations of the company will continue as heretofore, at Beaver Falls, Penn. and at Waltham, Mass.

The Socorro Mining & Milling Co. has been granted an extension until Jan. 25, 1917, by James A. French, State Engr., Santa Fé, N. M., for the completion of the hydro-electric plant to supply power to mines and mills in the Mogollon district, Socorro County, N. M. Work upon this plant has already been in progress almost three years, and about $90,000 has been spent. About $90,000 more will be required to complete the plant. It is planned to develop about 1000-hp. at the beginning, of which the larger part will be required by the Socorro Mining & Milling Co. Oil engines are now being used to develop power, and the operating expenses are high, due to the great expense of transporting oil from Silver City, 90 miles distant.

A Contract has been placed with the S. Morgan Smith Co., York, Penn., for two 45-in. vertical wicket gate wheels for the Bangor Water Works, Bangor, Maine. The power developed by these wheels is to be used to run motors in connection with the water system. The electrical equipment will be furnished by the General Electric Co.

CONTRACT PRICE

State Highways—California—Bids were received by the State Highway Commission, Sacramento, Calif., for constructing highways in Sutter, Los Angeles, Siskiyou and Orange Counties, from (A) Tyler & Berliner, Los Angeles; (B) Chico Construction Co., Chico; (C) P. L. Burr, San Francisco; (D) Tieslau Bros., San Francisco; (E) L. F. Gerdetz, San Francisco; (F) C. H. & A. W. Gorrill, San Francisco; (G) Bates, Borland & Ayer, Oakland; (H) Whitlock & Gorrill, San Francisco; (I) E. T. Johnson, Portland, Ore.; (J) Forest City Paving & Construction Co., San Francisco; (K) F. A. Keasal, San Francisco; (L) Robert Sherer, Los Angeles; (M) Chadwick & Sykes, Inc., San Francisco; (N) Lynn S. Atkinson, Los Angeles; (O) De Moor Construction Co., Los Angeles; (P) A. C. McLean Construction Co., San Francisco; (Q) Twohy Bros., San Francisco; (R) Mahoney Bros., San Francisco; (S) Richard Bothwell and A. H. McCray, Los Angeles; (T) H. A. Taylor, Los Angeles; (U) Palmer & McBryde, San Francisco; (U-1) James Fitzpatrick, Sacramento; (V) Smith & Brice, Eureka; (W) Warren A. Bechtel, Alton, Calif.; (W-1) Charles Daley & Co. and Hans Pederson, Seattle, Wash.; (X) F. Rolandi, San Francisco; (X-1) Callahan & Hedrick, El Centro; (Y) Blanchard-Brown Co., San Francisco; (Y-1) Berry Mackie & Co., San Francisco; (Z) M. A. Co., Inc., Los Angeles; (Z-1) Modern Construction Co., Inc., Los Angeles. The item bids were as follows:

Siskiyou County

	I	U	U-1	V	X	Y	Y-1
58,740 cu.yd. earth excavation	$0.29	$0.85	$0.50	$0.30	$0.73	$0.60	$0.35
17,130 cu.yd. loose rock excavation	0.49	0.85	0.75	0.60	0.73	0.75	0.68
36,160 cu.yd. solid rock excavation	0.84	0.85	1.00	1.10	0.73	1.10	0.80
3473 lin.ft. 12-in. corrugated iron pipe	0.40	2.00	1.75	0.60	0.60	0.60	0.50
1442 lin.ft. 18-in. corrugated iron pipe	0.60	2.25	2.00	0.70	0.75	0.70	0.70
636 lin.ft. 24-in. corrugated iron pipe	0.75	2.50	2.25	0.80	1.00	1.00	1.00
1144 cu.yd. concrete, Class B	17.75	25.00	15.00	18.00	17.00	15.00	12.00
2826 cu.yd. dry rubble	2.00	4.00	5.00	2.50	2.00	4.50	3.00
1150 cu.yd. slope paving	3.50	4.00	3.00	3.50	3.00	4.00	2.00
4.75 miles new property fences	150.00	250.00	200.00	250.00	150.00	200.00	100.00
880 monuments	1.00	1.00	1.50	1.00	1.00	1.00	1.00
Extended totals	$90,522	$154,265	$126,330	$105,715	$116,000	$128,316	$90,653

Orange County

	X-1	Z	Z-1
24,000 cu.yd. excavation without classification	$0.715	$0.55	$0.60
32 lin.ft. 12-in. corrugated iron pipe	0.50	0.50	0.75
352 lin.ft. 18-in. corrugated iron pipe	0.60	0.65	0.75
50 lin.ft. 24-in. corrugated iron pipe	0.80	0.80	0.75
18 lin.ft. 30-in. corrugated iron pipe	2.50	2.50	0.75
55 cu.yd. concrete Class B, for culverts and monuments	15.00	15.00	12.00
4860 cu.yd. concrete Class B for pavement	5.15	4.00	4.70
92 monuments	0.80	1.00	1.00
Extended totals	$45,344	$35,831	$40,763

Sutter County

	A	B	C	D	E	F	G	H	I	J
20,000 cu.yd. excavation without classification	$0.60	$0.65	$0.90	$0.85	$0.85	$0.65	$0.75	$0.68	$0.60	$0.55
552 lin.ft. 12-in. corrugated iron pipe	0.50	0.50	0.50	0.50	0.50	0.50	0.60	0.50	0.50	0.40
26 lin.ft. 18-in. corrugated iron pipe	1.90	0.65	0.70	0.60	0.60	0.60	0.60	0.75	0.75	0.50
26 lin.ft. 24-in. corrugated iron pipe	2.90	0.75	0.80	0.75	0.75	0.75	0.60	1.00	1.00	0.60
120 cu.yd. concrete, Class B, for culverts and monuments	17.00	9.00	9.50	10.50	10.00	9.50	10.00	9.50	10.00	9.50
11,500 cu.yd. concrete, Class B, for pavement	3.00	3.00	3.25	3.25	3.50	2.37	3.00	2.87	3.50	3.10
1500 lin.ft. guard rail	0.50	0.40	0.35	0.40	0.40	0.35	0.35	0.50	0.40	0.35
100 monuments	1.00	0.90	1.00	1.25	1.00	1.50	3.00	1.00	1.00	1.10
Extended totals	$49,791	$49,582	$53,455	$56,696	$59,461	$42,381	$51,887	$48,916	$54,471	$48,674

Los Angeles County

	K	L	M	N	O			P		
635,000 cu.yd. excavation, without classification	$0.48	$0.44	$0.695	$0.85	$0.37	$0.39	$0.41	$0.44	$0.46	$0.48
2480 lin.ft. 12-in. corrugated iron pipe	0.60	0.75	1.00	2.00	0.50	0.50	0.50	0.40	0.40	0.40
8140 lin.ft. 18-in. corrugated iron pipe	0.60	1.00	1.00	2.00	0.60	0.60	0.60	0.70	0.70	0.70
910 lin.ft. 24-in. corrugated iron pipe	0.80	1.25	1.00	2.00	0.70	0.70	0.70	1.00	1.00	1.00
310 lin.ft. 30-in. corrugated iron pipe	1.00	1.55	1.00	2.00	1.00	1.00	1.00	1.50	1.50	1.50
620 cu.yd. concrete, Class B	18.00	13.50	20.00	30.00	16.00	16.00	16.00	15.00	15.00	18.00
5930 cu.yd. dry rubble	3.00	3.50	5.25	8.00	0.50	0.50	0.50	3.00	3.00	3.00
1340 monuments	1.00	1.00	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Extended totals	$342,500	$321,483	$498,707	$630,810	$256,346	$268,946	$281,646	$315,895	$328,595	$343,155

	Q			R			S	T	U	V		W	W-1
635,000 cu.yd. excavation, without classification	$0.41	$0.415	$0.45	$0.41	$0.42	$0.45	$0.70	$0.53	$0.64	$0.575	$0.59	$0.76	$0.54
2480 lin.ft. 12-in. corrugated iron pipe	0.50	0.50	0.50	0.50	0.50	0.50	0.80	0.70	2.00	0.50	0.50	0.75	0.40
8140 lin.ft. 18-in. corrugated iron pipe	0.60	0.60	0.60	1.00	1.00	1.00	1.00	0.90	2.50	0.60	0.60	0.90	0.50
910 lin.ft. 24-in. corrugated iron pipe	0.75	0.75	0.75	1.00	1.00	1.00	1.25	1.25	3.00	0.70	0.70	1.25	0.65
310 lin.ft. 30-in. corrugated iron pipe	1.00	1.00	1.00	1.50	1.50	1.50	1.50	1.60	3.25	0.80	0.80	1.50	0.85
620 cu.yd. concrete, Class B	13.50	13.50	13.50	20.00	20.00	20.00	25.00	20.00	30.00	18.00	18.00	22.50	9.00
5930 cu.yd. dry rubble	4.00	4.00	4.00	4.00	4.00	4.00	8.00	5.20	5.00	3.50	3.50	7.25	2.00
1340 monuments	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.00	1.00	2.00	1.00
Extended totals	$300,896	$304,071	$326,296	$308,565	$314,915	$333,965	$520,506	$391,821	$485,372	$405,389	$414,914	1553,011	$367,597

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